

1
2 UNITED STATES DISTRICT COURT
3 EASTERN DISTRICT OF VIRGINIA
4 ALEXANDRIA DIVISION

5 01 COMMUNIQUE LABORATORY,)
6 INC.,)
7) Docket No. 1:10-cv-1007
8 Plaintiff,) Alexandria, Virginia
9)
10 v.) March 19, 2013
11) 10:08 a.m.
12 LOGMEIN, INC.,)
13) Volume II
14 Defendant.) (morning session)

15
16 TRANSCRIPT OF TRIAL

17 BEFORE THE HONORABLE CLAUDE M. HILTON

18 UNITED STATES DISTRICT JUDGE

19 AND A JURY

20
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34 Proceedings reported by machine shorthand, transcript produced
35 by computer-aided transcription.

1		<u>I N D E X</u>			
2		<u>Direct</u>	<u>Cross</u>	<u>Redirect</u>	<u>Recross</u>
3	<u>FOR THE PLAINTIFF:</u>				
4	A. Cheung	--	--	209	219
5	M. Anka (By Deposition)	231/269	--	--	--
6	A. Grimshaw	274	--	--	--
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1 P R O C E E D I N G S

2 THE COURT: All right. Good morning.

3 MR. STONER: Your Honor, while the jury is coming in, I
4 wanted to make the record clear -- it's just one of the
5 exhibits.

6 THE COURT: All right. Go ahead.

7 MR. STONER: Thank you, Your Honor. I just wanted to
8 make the record clear with one of the exhibits yesterday. We
9 had offered Defendant's Exhibit 167, and there was no objection.
10 I just wanted to make sure that it was in evidence.

11 THE COURT: I don't remember, but I'll grant it.

12 MR. SHUNK: That's correct, Your Honor. We did not
13 object.

14 THE COURT: All right. It's admitted. All right. Go
15 ahead with your question.

16 MR. SHUNK: Thank you, Your Honor. And I have a
17 similar request. That is, we discussed Plaintiff's Exhibit 34
18 with Mr. Cheung yesterday, but I failed to move for its
19 admission, and I move now to admit Plaintiff's Exhibit 34.

20 THE COURT: It's admitted.

21 MR. STONER: No objection, Your Honor.

22 THE COURT: It's admitted.

23 REDIRECT EXAMINATION

24 BY MR. SHUNK:

25 Q. Good morning, Mr. Cheung.

1 A. Good morning.

2 Q. I want to just follow up on a few questions that Mr. Stoner
3 asked you yesterday. The first one relates to Defendant's
4 Exhibit 177.

5 Could you get that out of the Defendant's exhibit binder
6 that you have up there?

7 A. Yes.

8 Q. It might be behind you to the right.

9 A. Yes, I have here 177.

10 Q. This is the declaration that you submitted to the Patent
11 Office in order to try to speed up your patent application?

12 A. Yes.

13 Q. Okay. And do you remember telling Mr. Stoner that in this
14 declaration you told the Patent Office that your invention was,
15 quote, conceived of -- conceived of in November 15, 1999?

16 A. Yes.

17 Q. What did you think conceived meant back then?

18 A. That was the first time I involved in a patent application
19 process so I clearly did not understand the terms conception
20 date, conceive. My understanding was that it was the date when
21 I first disclose the concept to our patent attorney.

22 Q. Under that understanding of the word conceived, was your
23 statement that your invention was conceived in November of 1999
24 true when you submitted the declaration?

25 A. When I submitted at that time, that's what I thought it was

1 true.

2 Q. Now, in this court you testified that you conceived of the
3 invention sometime prior to September of 1997; is that correct?

4 A. Yes.

5 Q. When you gave that testimony, what was your understanding of
6 the word conception?

7 A. At that time, my conception means that you have everything
8 in your mind about how this technology works was the real
9 conception date.

10 Q. And when you gave your testimony in this court, was that
11 truthful testimony?

12 A. Absolutely.

13 Q. Would you turn now to a document that I placed in your -- in
14 the exhibit binder that we used for your direct examination. I
15 put it inside the pocket in the -- the front. It's Defendant's
16 Exhibit 163.

17 A. Okay. This document, yeah, 163, I see it.

18 Q. Turn to the last page of the document. Do you recognize
19 your name?

20 A. Yes, I can see my signature there.

21 Q. Okay. And what's the date that you signed this?

22 A. July 21, 2008.

23 Q. And where did you submit this declaration?

24 A. We submit this declaration -- let me take a look first --
25 take a quick look. I submitted this declaration to the Patent

1 Office during the reexamination.

2 Q. Okay. Turn to paragraph 4, sir.

3 A. Yes.

4 Q. Looking through paragraph 4, what did you tell the Patent
5 Office during the reexamination was the correct date on which
6 you conceived of your invention?

7 A. What I said here was by the fall of 1997, I had come up with
8 the solution to the problem as is set forth in the '479 patent.

9 Q. Okay. My next questions, Mr. Cheung, are about Defendant's
10 Exhibit 173. Can you turn to that, please, in the Defendant's
11 binder?

12 A. Okay. Give me a sec. Yes. 173 you said?

13 Q. Do you remember -- turn to page 25. And my question is
14 whether you remember being asked questions about some of the
15 statements that you made in your statements to the Canadian
16 government on that page.

17 A. Yes. I have here page 25.

18 Q. If you look down to the third set of paragraphs, right under
19 the heading, do you remember being asked questions by Mr. Stoner
20 about your statement that, first of all, the biggest uncertainty
21 is that we are not sure at all whether the farming can work
22 without affecting the efficiency of data delivery throughput?

23 A. Yes, I remember.

24 Q. By that statement, Mr. Cheung, did you mean that you were
25 not able to write a distributed software version of your

1 invention?

2 A. Of course not. We certainly knew how to do software server
3 farming at a time of this invention as it was well known to the
4 world of software developer at that time about how you can split
5 a server into multiple different pieces in order to handle extra
6 loads.

7 This SRED document was -- this SRED document described how
8 we continuously experimented different commercial implementation
9 method in order to improve the load balancing aspect of our
10 commercial service offering.

11 Initially in 2000, the way that we handle load balancing was
12 that we chop off the software on the locator server into
13 different pieces and distributed them among different computers.
14 And --

15 Q. Did that work when you did that?

16 A. Absolutely. Absolutely. And this SRED document actually
17 described how we -- how we experimented another way, which is --
18 which was how to combine all the software on the locator server
19 into one single box while having multiple same boxes to
20 collectively share the load.

21 And this same SRED document also further described into how
22 we experimented into yet some other different ways to further
23 improve the -- the commercialization process in this aspect,
24 such as -- remember, I said here memory sharing method and
25 central traffic control, something like that. And, in fact, we

1 are still -- even up to today, we are still experimenting into
2 different commercial implementation method in order to improve
3 that aspect.

4 Q. Okay. Now, if you take a look in the first paragraph, does
5 the first paragraph give an explanation for the kind of problems
6 that you were seeing with this different methodology you just
7 described?

8 A. Yes.

9 Q. Explain that to the jury, please.

10 A. Yeah, it's basically explained that how, you know, we were
11 facing -- or we would anticipate facing challenges continuously.
12 As I said, even up to now, today, we're still researching to any
13 experimental method that could -- could improve and further
14 improve that aspect of our commercial service offering. So this
15 basically explains that point, that we continue researching into
16 additional ways.

17 Q. Turn now to Defendant's Exhibit 126 about which Mr. Stoner
18 had some questions for you yesterday.

19 A. 126. Yes. I have it here.

20 Q. Okay. Turn to the second page. Do you recall Mr. Stoner
21 asking you questions about the statements that were made by
22 Dr. Ganger in paragraph 6?

23 A. Paragraph 6. Yes. I see it here.

24 Q. And do you remember him asking you about the -- the final
25 sentence in the paragraph that says one of ordinary skill in the

1 art would not view this language, and particularly its repeated
2 use of forms of create, to be satisfied by an alleged location
3 facility that is simply used by some other component that
4 creates the communication channel?

5 Do you see that?

6 A. I see that.

7 Q. Now, would you tell the jury, when you read this declaration
8 by Dr. Ganger in the course of the reexamination, what did you
9 understand the word component to mean in that sentence?

10 A. In the context of this --

11 MR. STONER: Objection, Your Honor. I object. The
12 document says what it says. His understanding of it is not
13 relevant.

14 THE COURT: Objection sustained.

15 MR. SHUNK: If the Court please, the witness'
16 understanding of this document is one of the intent issues that
17 the defendant is raising with regard to its inequitable conduct
18 defenses. I think it is important that the witness be allowed
19 to say what he understood it to mean.

20 THE COURT: That may be right. Objection overruled.

21 BY MR. SHUNK:

22 Q. And so, briefly, just tell the jury what you understand the
23 word component to mean -- what you understood the word component
24 to mean when you read it during the re-exam.

25 A. Yes. In the context of this document, the component clearly

1 meant to me that remember our patent, that it has three
2 components; the personal computer, the locator server, and the
3 remote computers. Those are the three components in the patent
4 as how I described yesterday. Those are the components, what it
5 meant.

6 Q. And now, Mr. Cheung, you remember Mr. Stoner asking you
7 about why you didn't sue LogMeIn during various years?

8 A. Yes. I remember.

9 Q. Let me ask you specifically. Did your company have the
10 resources to sue LogMeIn in 2005?

11 A. In 2005, before we sue the -- before the launch of the
12 Citrix lawsuit, yes, we do.

13 Q. Why didn't you sue LogMeIn at that time?

14 A. At that time Citrix was a much bigger problem to us than
15 LogMeIn at that time.

16 Q. Why didn't you sue both of them at the same time?

17 A. As I think I have testified yesterday, that we were just a
18 small company without enough resources to sue two potential
19 infringers at the same time.

20 Q. Did you have the resources to sue LogMeIn in 2006?

21 A. No, we don't.

22 Q. Did you have the resources to sue LogMeIn in 2007?

23 A. No, we didn't.

24 Q. Did you have the resources to sue LogMeIn in 2008?

25 A. No, we didn't.

1 Q. Did you have the resources to sue LogMeIn in 2009?

2 A. No, we didn't.

3 Q. Turn to Defendant's Exhibit 160, Mr. Cheung. You were asked
4 questions about that yesterday, were you not?

5 A. 160. Yes. I have 160 here.

6 Q. Remind the jury what Exhibit 160 is.

7 A. Exhibit 160 is the document about -- about the Accolade,
8 which is the owner of that '888 patent, suing 01 for a patent
9 infringement.

10 Q. Now, sir, look at the top of the first page. Could you tell
11 the jury whether there were any other companies sued by Accolade
12 in that same lawsuit?

13 A. In that same lawsuit, aside from 01, it was also asserted
14 against a company called Symantec Corp and another one, LogMeIn.
15 Symantec, S-y-m-a-n-t-e-c, and LogMeIn.

16 Q. So LogMeIn was also a defendant in that case?

17 A. Yes.

18 Q. Now, you remember that Mr. Stoner also showed you the
19 LogMeIn patent that the lawyers sometimes call the '888 patent?

20 A. Yes, I remember.

21 Q. And you knew about the '888 patent at least by the time that
22 you received this lawsuit, right?

23 A. Yes.

24 Q. Tell the jury, Mr. Cheung, why you did not submit the '888
25 patent to the United States Patent and Trademark Office.

1 A. Very simple. Technically, this patent has nothing to do
2 with our technology. And I think it is -- one important thing
3 worth mentioning was that in addition to this defendant, Citrix
4 was also sued by this same '888 patent in another lawsuit. And
5 Citrix --

6 MR. STONER: I object, Your Honor.

7 MR. SHUNK: Hold on.

8 MR. STONER: It's irrelevant.

9 THE COURT: Objection overruled.

10 MR. SHUNK: Thank you, Your Honor.

11 BY MR. SHUNK:

12 Q. Continue.

13 A. Citrix was also being sued by this same '888 patent in
14 another lawsuit, and Citrix did not even bother bringing that
15 '888 patent up in the reexamination process against our '479
16 patent. How relevant can it be?

17 Q. Okay. So -- but focusing on what you knew and believed, can
18 you explain to the jury why you didn't submit the '888 patent?

19 A. As I said, it's very simple. It has nothing to do with our
20 technology. It doesn't solve any of the -- the three problems I
21 testified yesterday, the dynamic IP addresses, firewall, and
22 routers.

23 Q. Let me ask you that question then more generally.

24 Mr. Stoner showed you several different patents yesterday.
25 Did any of those patents solve all three of the obstacles;

1 firewalls, dynamic IP addresses, and routers that you talked
2 about in your direct testimony? Did any of them do all three?

3 A. Once again, I'm not a patent attorney. I can only express
4 my opinion in the technical point of view. They -- none of them
5 solve those three problems.

6 MR. SHUNK: Your Honor, thank you very much.

7 MR. STONER: Recross, Your Honor?

8 THE COURT: All right.

9 RECROSS EXAMINATION

10 BY MR. STONER:

11 Q. Mr. Cheung, do you have the '888 patent in front of you?

12 A. No, I didn't. Can you point me to the number?

13 Q. Yes. It's Defendant's Exhibit 27.

14 A. Yes.

15 Q. Very first sentence of that patent says: The present
16 invention permits virtually the entire functionality of a
17 computer system to be made accessible over a network such as the
18 Internet or an intranet.

19 Do you see that?

20 A. Yes, I see that.

21 Q. That has nothing to do with your invention, does it?

22 A. As I said, if you are taking out of context one sentence
23 trying to explain the whole patent, yeah, probably you're right.

24 Q. That sentence also describes how LogMeIn's system works,
25 doesn't it?

1 A. I don't know how to use one sentence to describe one's whole
2 system. I don't think that's appropriate.

3 Q. Well, that sentence is an accurate statement about LogMeIn's
4 system, isn't it?

5 A. I cannot agree.

6 Q. LogMeIn's system permits virtually the entire functionality
7 of a computer system to be made accessible over a network such
8 as the Internet or an intranet, correct?

9 A. I think if you are trying to use one sentence --

10 Q. Isn't it true?

11 A. -- to describe the whole thing --

12 Q. It's true, isn't it?

13 A. I cannot agree.

14 Q. This -- that technology -- LogMeIn's technology has nothing
15 to do with your invention either, does it?

16 A. I totally disagree.

17 Q. Well, turn to Fig. 1 of the '888 patent.

18 Do you have that?

19 A. Yes, I have.

20 Q. It shows a host computer, correct?

21 A. Yes.

22 Q. LogMeIn has a host computer, correct?

23 A. Yes.

24 Q. It has a client computer in Fig. 1?

25 A. What's your question?

1 Q. Fig. 1 of the '888 patent has a client computer, correct?

2 A. Yes.

3 Q. LogMeIn has a client computer, correct?

4 A. Yes.

5 Q. It has the Internet in between the two, correct?

6 A. Yes.

7 Q. And it has a server connecting the two host and client
8 computers across the Internet, correct?

9 A. No, not correct.

10 Q. '888 patent has a server connecting the computers, correct?

11 A. It has a server, but it's not connecting them.

12 Q. It is allowing one computer to access another computer,
13 isn't it?

14 A. I disagree.

15 Q. Well, host and client computer have nothing to do with your
16 invention, correct?

17 A. Simply host and client, yes. You're right.

18 Q. All right. And you told the jury now that the reason you
19 did not tell the Patent Office about it -- about the '888 patent
20 is that you supposedly thought it was very different, correct?

21 A. Yes.

22 Q. That's not what you said in your deposition before this
23 trial, is it?

24 A. Maybe not word by word.

25 Q. Well, do you have your deposition, page 348 of your

1 February 10 deposition?

2 A. Yes. I can -- which date was the --

3 Q. February 10, 2011.

4 A. Yes. Can you point me to the page number?

5 Q. Page 348.

6 A. Yes.

7 Q. You have that before you?

8 A. Yes.

9 Q. This was over two years ago, correct?

10 A. Yes.

11 Q. Two years ago closer in time to the events we're talking
12 about?

13 A. Yes.

14 Q. And you were asked under oath, question: Now, during the
15 reexamination, did you ever think, should I tell the Patent
16 Office about this '888 Accolade patent?

17 And your answer was: Not that I'm aware of.

18 A. You're right.

19 Q. You didn't even think about it. That's your testimony,
20 right?

21 A. In fact, it never came out of my mind.

22 Q. The next question: Did you make a decision not to tell the
23 Patent Office about the Accolade patent?

24 Your answer was: It didn't even come up in my mind.

25 Correct?

1 A. Correct.

2 Q. It isn't because you thought it was different. You say you
3 didn't even think about it.

4 A. As I said, maybe not word by word, but meant the same thing.

5 Q. You didn't even think about it -- you say you didn't even
6 think about it even though you signed an agreement in the middle
7 of this to give Accolade a cut of the money from suing on your
8 '479 patent?

9 A. You're right. It never come up in my mind.

10 Q. You talked about whether you had resources to sue LogMeIn --

11 A. Yes.

12 Q. -- right? You certainly had resources to send a letter,
13 right?

14 A. I think you asked me that question yesterday. We do have
15 resources to send a letter, but we don't have resources to
16 handle the consequence that could be caused by sending that
17 letter.

18 Q. Do you have resources to call Mr. Simon and say we think
19 there's an issue?

20 A. I think my answer would be the same.

21 Q. Well, you know, you're a businessman, right, Mr. Cheung?

22 A. Yes.

23 Q. You try to work out problems with people, your competitors,
24 if you can?

25 A. Yes.

1 Q. You didn't try to work anything out with LogMeIn, right?

2 A. As I said, I think I would have the same answer. If the
3 effort trying to work it out we'll be starting certainly a
4 bigger problem, I probably wouldn't do it.

5 Q. You never tried, did you?

6 A. I never tried.

7 Q. Mr. Cheung, Mr. Shunk asked you questions about Dr. Ganger's
8 declaration to the Patent Office describing what a location
9 facility is in your patent, right?

10 A. Yes.

11 Q. He asked you about paragraph 6, what the word component
12 meant, correct?

13 A. Yes.

14 Q. You said, well, to you it means a personal computer or
15 remote computer, right?

16 A. Yes.

17 Q. The words personal computer and remote computer are nowhere
18 in paragraph 6, right?

19 A. It's not in there, but that's what it meant.

20 Q. Mr. Cheung, would you agree that the records of what things
21 happened at the time are a more accurate reflection of what
22 happened than your memory today?

23 A. I don't think that's necessary because memory does not
24 necessarily fade in time. It usually, you know, is more related
25 to relevance. For example, I think I would remember my

1 anniversary date after so many years, 20-something years. But
2 if you asked me do I remember what I ate for lunch last week, I
3 probably don't remember.

4 Q. Mr. Cheung, do you still have your deposition in front of
5 you?

6 A. Yes. Which one are you referring to?

7 Q. February 10, 2011.

8 A. Yes.

9 Q. Turn to page 311. Do you have that in front of you?

10 A. 311. Yes. I have it here.

11 Q. Your sworn testimony from two years ago.

12 A. Yes.

13 Q. You were asked the question: And that's why records of what
14 happened at the time are a more accurate reflection of what
15 happened than your memory today, correct?

16 A. I think I just testified that not necessarily.

17 Q. Mr. Cheung, you were asked that question, correct?

18 A. Can you point to me which line?

19 Q. Line 5. Question: And that's why records of what happened
20 at the time are a more accurate reflection of what happened than
21 your memory today, correct?

22 A. Yes.

23 Q. And your answer was: I would say logically, yes, it's more
24 accurate. You know, it's better, I would say a better
25 reflection.

1 That's what you testified, correct?

2 A. Yes. I think logically that's correct, but not
3 necessarily --

4 Q. I'm sorry.

5 A. I think that's logically correct, but it's not necessarily
6 as how I have just testified.

7 Q. Do you remember you gave that testimony under oath?

8 A. Which testimony are you referring to? Sorry.

9 Q. That we just read.

10 A. Yes.

11 Q. Do you remember you gave that testimony two years ago?

12 A. Probably word by word I couldn't.

13 Q. Finally, Mr. Cheung, I'm going to talk again about this
14 document you submitted to the Canadian government, Defendant's
15 Exhibit 173. Do you have that in front of you?

16 A. Yes, I do.

17 Q. Do you have page 25 of that document?

18 A. Yes, I do.

19 Q. What you told the jury this document was about is not what
20 it says, right?

21 A. No. I said it said what it says.

22 Q. You would agree what a document says is a more accurate
23 reflection of what happened back in 2004 than your
24 characterization of it now, nine years later?

25 Wouldn't you agree with that?

1 A. I would not agree. This is exactly how I meant when I wrote
2 those documents.

3 Q. Okay. Let's take it piece by piece then. The first very
4 sentence of the page, the title of the page is Server Farming,
5 correct?

6 A. Yes.

7 Q. That's using multiple servers, correct?

8 A. Yes.

9 Q. And you say -- the first sentence, the first complete
10 sentence says that with a completion of many different phases of
11 the iServer project, we are beginning to encounter a related
12 problem, multiple servers platform, period --

13 A. Yes.

14 Q. -- right?

15 And then you continue: While there is a limited number of
16 simultaneous session a single locator server can handle, we need
17 to investigate and implement an efficient architecture to
18 support virtually an unlimited scalability of the server
19 infrastructure while not having any noticeable degrade on the
20 performance of the service we are providing.

21 Do you see that?

22 A. Yes.

23 Q. Did I read that correctly?

24 A. You read that correctly word by word.

25 Q. I read that correctly word by word, correct?

1 A. Right.

2 Q. This is what you wrote, correct?

3 A. This what I wrote.

4 Q. This is what you made sure was accurate before you submitted
5 it to the Canadian government, correct?

6 A. Yes.

7 Q. And this was in 2004, correct?

8 A. Yes.

9 Q. Which was four years after you filed your patent
10 application, right?

11 A. Yes.

12 Q. Four years after you filed your patent application, you say
13 we need to investigate and implement an efficient architecture,
14 correct?

15 A. Yes.

16 Q. Now, Mr. Cheung {sic} asked you about some -- one sentence
17 in part 2-C, which is called Technological Uncertainties,
18 correct?

19 A. Yes.

20 Q. The last sentence of the first paragraph says: Now, if the
21 locator's registration server and the locator portal servers are
22 located in different machines, we are not sure how the
23 architecture could still function, unquote. Correct?

24 A. Yes.

25 Q. That's what you said at the time?

1 A. Yes.

2 Q. You're telling this to the Canadian government because you
3 wanted them to give you a tax break for doing more work, right?

4 A. Yes.

5 Q. So you were very careful to tell them accurately a state of
6 development of your technology, right?

7 A. Yes.

8 Q. And the state of the development of your technology even
9 four years after you filed your patent application was you were
10 not sure, if you put the server functionality on different
11 machines, how your architecture would still function, correct?

12 A. Incorrect.

13 Q. That's what you told the Canadian government, isn't it, sir?

14 A. The way how you mischaracterizing what I wrote was
15 incorrect.

16 Q. The next page you talk about -- page 26 of Defendant's
17 Exhibit 173, you talk about having built a prototype to try to
18 do this, right?

19 A. Correct.

20 Q. And the first thing you say is: The system was crashed
21 after continuously running for more than a few hours, right?

22 A. Yes.

23 Q. You tried something else and you said: All the internal
24 memories on each locator registration server were totally
25 consumed, crashing eventually. Correct?

1 A. Yes.

2 Q. And then you say you tried to build another prototype,
3 right?

4 A. Yes.

5 Q. It wasn't ready yet, right?

6 A. Yes.

7 Q. Even four years after your patent application, right?

8 A. Yes.

9 MR. STONER: No further questions, Your Honor.

10 MR. SHUNK: Nothing further.

11 THE COURT: Thank you. You may step down.

12 (Witness stands down.)

13 THE COURT: Who's next?

14 MR. CORRADO: 01 would call Marton Anka through
15 deposition designations.

16 Your Honor, we would like to have a member of our law
17 firm, Stuart Bassin, read since Mr. Anka is not here to read the
18 testimony of Mr. Anka.

19 THE COURT: All right.

20 MR. CORRADO: Your Honor, I prepared a binder of
21 exhibits that will be referenced in the deposition, which I'd
22 like to hand to the Court, if I may.

23 Your Honor, there are two -- there are two binders
24 there. For the convenience the Court, we have extracted any of
25 the pages of the deposition transcript that we're not going to

1 read. One of those is simply the designations that we offer.
2 The second package I gave you is combined designations that we
3 would offer and the defendant also intends to offer.

4 THE COURT: All right.

5 (Deposition testimony of MARTON ANKA read into the record as
6 follows.)

7 DIRECT EXAMINATION

8 BY MR. CORRADO:

9 Q. Can you state your full name for the record.

10 A. Marton Anka.

11 Q. Are you employed?

12 A. I am.

13 Q. By whom?

14 A. LogMeIn.

15 Q. What is your title?

16 A. My title is chief technology officer.

17 Q. What are your job duties as chief technology officer?

18 A. Many. I essentially help formulate new products. And then
19 the engineering team and the operations team report to me. I
20 ensure that the technology we use in either product development
21 or the datacenter operations is sound.

22 Q. You mentioned that you help formulate new products. Which
23 new products have you helped formulate?

24 A. All of them, all of the new products.

25 Q. And when you say formulate, what do you mean?

1 A. I know it's a somewhat vague term. Come up with feature
2 sets, decide on the user experience, figure out how the various
3 problems are going to be solved, and then what path we are going
4 to take to implement the solutions.

5 MS. FERRERA: Your Honor, could we just make clear that
6 this individual is not Mr. Anka just so that the jury
7 understands that, please?

8 THE COURT: I'm sorry?

9 MS. FERRERA: Could we just make clear that this
10 individual is not Mr. Anka? The way he's reading it is
11 obviously not how Mr. Anka would necessarily answer.

12 THE COURT: I think everybody understands that.

13 MS. FERRERA: Thank you, Your Honor.

14 BY MR. CORRADO:

15 Q. You went to university in Hungary?

16 A. I went to school in Hungary, yes.

17 Q. And did you get a degree?

18 A. I have a diploma, yes.

19 Q. How many years of study did that require?

20 A. It was two years.

21 Q. So two years after high school?

22 A. Two years after high school, yes.

23 Q. And subsequent to that, did you have any other formal
24 education?

25 A. I did not.

1 Q. What was your next job?

2 A. My next job was with a company in Budapest again. The
3 company's name was Uproar.

4 Q. And did you join another company?

5 A. I created a small company to help with the day-to-day
6 activities of creating the software, specifically creating and
7 promoting Remotely Anywhere.

8 MR. CORRADO: That was a question. Let me ask the
9 question.

10 BY MR. CORRADO:

11 Q. Specifically creating and promoting Remotely Anywhere?

12 A. Yes.

13 Q. Thank you.

14 I understand -- thanks. And so the software that you
15 designed was installed on the host computer only?

16 A. Yes.

17 Q. What about if the host computer was behind a firewall?

18 A. It would work even in that scenario.

19 Q. And what would you have to do to make it work?

20 A. You would have to reconfigure the firewall to do what -- to
21 enter port mapping, essentially map a certain port on the
22 firewall to the internal IP address and port of the software of
23 Remotely Anywhere.

24 Q. So essentially you would have to have open a port in your
25 firewall that was guarding the host computer?

1 A. That's right.

2 Q. And did you have to do that?

3 A. I think we did that at Uproar, yes.

4 Q. And are you aware of anybody else doing that?

5 A. I don't know. I'm not aware of any particular instance --
6 of the instances of this being done.

7 Q. Do you know how customers of Remotely Anywhere handled or
8 would have handled the firewall issue?

9 A. I don't know it with certainty, no.

10 Q. But they would have to open a port in the firewall to
11 access --

12 A. That would be the most obvious way to get this to work.

13 Q. And what language was Remotely Anywhere written in?

14 A. Primarily C and C++.

15 Q. Okay. So in 2002 you brought in Michael Simon as a CEO of
16 3AM Labs; is that right?

17 A. In 2002 we agreed that he would come onboard. And in 2003
18 we formed a new company that took over the assets of my previous
19 venture, including the intellectual property, most importantly,
20 the intellectual property of Remotely Anywhere, and he became
21 CEO and I became CTO of this new company.

22 Q. And what was the name of the new company?

23 A. It was called 3AM Labs. It's just shorter. It's not 3AM
24 Laboratories Partnership. It's just 3AM Labs.

25 Q. Where was that company registered?

1 A. The company was registered in Bermuda, I think.

2 Q. You also mentioned that 3AM Labs took ownership of the
3 intellectual property of your previous company?

4 A. Right.

5 Q. Were there any patents?

6 A. Not at the time, no.

7 Q. Do you recall what your percentage was?

8 A. Yeah. Michael and I started the company at the
9 50/50 percent ownership.

10 Q. Okay. So there came a time when the company released the
11 LogMeIn Pro product. Was that in 2004?

12 A. That's right, yes.

13 Q. Can you just -- can you describe just very briefly that
14 product?

15 A. You mean the functionality of the product?

16 Q. Sure, the functionality of that product.

17 MS. FERRERA: Your Honor, can we have a
18 counter-designation? I'm sorry. We have a counter-designation.
19 We would like to have the lines -- 44, 23, to page 45, line 4,
20 read as part of the answer that counsel's --

21 MR. CORRADO: I'm happy to do that, Your Honor.

22 BY MR. CORRADO:

23 Q. Okay. I think it's good way of try -- I'm sorry.

24 A. Okay. I think a good way of trying to describe that is that
25 essentially it had most of the functionality of what the

1 Remotely Anywhere product did, which would include desktop
2 remote control, you can transfer files back and forth.

3 The important distinction was that the end user did not have
4 to worry about things like having to reconfigure firewalls.

5 MS. FERRERA: Then we have another counter-designation,
6 Your Honor. Page 45, lines 12 through 17.

7 MR. CORRADO: Your Honor, I really don't want this to
8 become a sort of cross-examination in the middle of this
9 reading.

10 THE COURT: Well, are we following right along in the
11 deposition?

12 MS. FERRERA: Yes.

13 MR. CORRADO: Yes, Your Honor.

14 THE COURT: I think as long as you're following, why,
15 that doesn't become that.

16 BY MR. CORRADO:

17 Q. Anything else?

18 A. I mean, there were obviously many differences. We
19 redesigned the user interface to be more appealing to a casual
20 user. A lot of that work went into that product. It took about
21 a year calendar time to actually launch it.

22 Q. Do you remember when that product was launched?

23 A. I do, I do actually remember the date specifically. It was
24 2004, April 13th.

25 Q. Okay. So your company was working on LogMeIn Pro from

1 approximately early 2003 until its release in April of 2004?

2 A. That's right.

3 Q. Now these additional features that we talked about, for
4 example, being able to traverse a firewall and other features
5 that were added to the LogMeIn Pro, how did you get the idea to
6 add these particular features in it?

7 A. I have been marketing Remotely Anywhere for about five years
8 now, and what I found -- Michael and I were looking at some of
9 the data, and what I had found was that there's a lot of
10 interest from nontechnical people for remote access.

11 And we had a fair number of trials. People would come to
12 the website, download the product and then try it but never
13 actually purchased it.

14 And we came to the conclusion that the problem for casual
15 users is the product is too hard to get up and running it. If
16 you're a system administrator, the product is exactly what you
17 would expect it to be. If you're a casual, somewhat
18 nontechnical user, then the product is too hard to use.

19 So we decided to do everything we can to make the user
20 experience as seamless as possible.

21 Q. Were there any commercial products available at the time
22 that offered the same features that you were offering?

23 A. Yeah, actually. So I have personally been a customer of
24 GoToMyPC.

25 Q. You were aware at the time that Citrix, through their

1 GoToMyPC product, allowed traversal of the firewall, correct?

2 A. It was actually Expertcity, and I think Citrix acquired them
3 later. And by the -- by we, we were aware of the Citrix
4 product, yes.

5 Q. And did your LogMeIn Pro product in 2004 permit access of a
6 host computer having a dynamic IP address?

7 A. Yeah. Absolutely, absolutely.

8 Q. Okay. And what's the basis for saying that?

9 A. Well, essentially the LogMeIn Pro product allowed access to
10 any computer as long as that computer could make an outbound
11 connection.

12 So if the computer had -- the system doesn't know if the
13 computer has a dynamic IP address or a static IP address. If
14 the computer in question has been directly connected to the
15 Internet or connects to the Internet through a process server or
16 some other gateway device, if the software can make an outbound
17 connection, then the software can be used to access that
18 computer.

19 Q. Okay. And the outbound connection is made to what entity?

20 A. To our datacenter.

21 Q. Okay. I believe in your document you call that the gateway?

22 A. No. The gateway refers to a piece of the LogMeIn
23 infrastructure. There are many other components that make
24 remote access possible.

25 Q. Whose idea was it to design the LogMeIn Pro in such a way

1 that a host computer having a dynamic IP address could be
2 accessed?

3 A. As I mentioned earlier, we didn't really give much thought
4 to dynamic IP addresses.

5 Actually, our main person was accessing computers that are
6 behind firewalls because that was the main issue that we
7 identified with our customer base.

8 Q. How did 3AM Labs implement the firewall traversal feature?

9 A. So, again, as mentioned earlier, if a computer can make an
10 outbound connection but cannot receive inbound connections, the
11 basic principle is the outbound connection that it makes can be
12 used to exchange information with it.

13 Q. Okay. Did 3AM Labs know about 01 Communique in 2003?

14 A. No, we did not.

15 Q. How about in 2004?

16 A. We did.

17 Q. And how did you become aware of 01 Communique?

18 A. Our PR person, who was very diligent at monitoring
19 publications for news about remote access products, identified
20 an article that appeared in -- I'm not sure what the publication
21 was. It was a short article that talked about the I'm InTouch
22 product of 01 Communique. So it talks about the I'm InTouch
23 product in a reasonably favorable light.

24 And he e-mailed that article around the company. That's how
25 we heard about it.

1 Q. And what's that person's name?

2 A. His name is Joseph Eckert, E-c-k-e-r-t. He doesn't work for
3 the company anymore.

4 Q. And what year was that?

5 A. This was spring of 2004.

6 Q. And what did you do when you found out about 01 Communique?

7 A. Well, I was obviously curious because we had just launched
8 our LogMeIn Pro offering, and there is this article a week
9 later, not about us, but about a competitor, so I wanted to see
10 it. I was curious what a new competitor has to offer that may
11 be better or worse than us.

12 Q. So what did you do?

13 A. I went and downloaded the product shortly after the article
14 was e-mailed to me.

15 Q. And you used I'm InTouch at that time?

16 A. Yeah.

17 Q. You're aware at that time that I'm InTouch provided a way to
18 remotely access a host computer that was behind a firewall,
19 correct?

20 A. I think so. I think the article that was e-mailed did make
21 it clear that it was what we call a hosted remote access
22 solution.

23 Q. What does that mean?

24 A. The hosted remote access solution is sort of, at least in
25 the language that we use at LogMeIn, is a remote access solution

1 that has a central component hosted in a datacenter or
2 datacenters which central system facilitates an easy way for
3 computers to connect to each other.

4 Q. And that's how LogMeIn Pro works as well?

5 A. Well, that's a very general statement. There is a
6 datacenter that we are on which implements a system which allows
7 easy access to remote computers.

8 Q. We talked about the hosted remote access.

9 A. Yes.

10 Q. That was the system architecture that you used in 2004 for
11 your LogMeIn Pro product, correct?

12 A. That's a very general term to describe it, but yeah.

13 Q. Just so I understand, you would have a remote computer, a
14 host computer that's going to be accessed in your datacenter
15 which consisted of several servers; is that right?

16 A. As a very broad picture, it is correct. I would say it's
17 only as a very broad picture.

18 We have many datacenters, and what you have in datacenters
19 are not just individual servers but actual systems that comprise
20 of multiple servers.

21 Q. What are the systems that comprise of multiple servers?

22 A. I think there's -- looking at the products in question and
23 remote access in particular --

24 Q. Okay.

25 A. -- it's three main classes of three systems. Essentially

1 there's the gateway component, which manages connections. There
2 is the database cluster where --

3 Q. Let me stop you for a second. So the gateway is one or more
4 servers; is that right?

5 A. It's many servers.

6 Q. Okay. Sorry for interrupting. Please continue.

7 A. Then you have the database component which is, again, many
8 servers.

9 Q. Okay.

10 A. And then you have the web servers which, again, many
11 servers.

12 MS. FERRERA: Your Honor, we would like to just read
13 the next two lines, 17 and 18.

14 BY MR. CORRADO:

15 Q. And can you briefly describe what each of those three
16 components do?

17 A. I'm sorry. You were asking to briefly describe what each
18 component does?

19 Q. Yes, please.

20 A. Okay. The web server's essentially indirectly the user or
21 the end user's browser. They display user interface, they
22 render graphics, they essentially act as a front end that faces
23 the user.

24 The gateway servers manage connections, and the database
25 servers implement all the logic. Essentially, all the business

1 logic is in the database servers.

2 Q. What do you mean by business logic?

3 A. Anything and everything that has to do with tracking
4 identifying, managing any entity that's part of the system is
5 done in the database.

6 Q. Okay. So that was the basic architecture in 2004. Is that
7 the same today?

8 A. Yeah.

9 Q. Okay. And is that what's known as the gravity platform?

10 A. Well, the gravity platform is essentially a name that we
11 will -- that we call our datacenter. It's sort of a marketing
12 name. It's not a technical term.

13 Q. Okay. And when you say datacenter, you mean the three
14 components, web server, gateway server, database server?

15 A. Anything and everything that's hosted in one of our
16 datacenters we consider part of gravity.

17 MS. FERRERA: And, Your Honor, I'd like to read the
18 rest of that answer, lines 23 through 25, and page -- line 1 on
19 the next page.

20 THE WITNESS: Like I said, it's a marketing term. It
21 doesn't really -- engineering in the company never really
22 thought about gravity. It was just too vague.

23 BY MR. CORRADO:

24 Q. So with respect to LogMeIn Free, the general architecture
25 that we've been discussing is used; is that right?

1 A. That is correct, yes.

2 Q. With respect to LogMeIn Pro2, is the general architecture
3 that we've been discussing used?

4 A. Yeah, that's right.

5 Q. And what about LogMeIn Ignition, is that general
6 architecture --

7 A. I think the short answer is yes.

8 Q. What about Join.me?

9 A. Join.me would be, yeah. Definitely.

10 Q. What about IT Reach?

11 A. IT Reach is a product that we don't actually have anymore.
12 It was fairly short. We marketed it for a couple of years. But
13 when it was on the market, it used the same mechanisms.

14 Q. And I believe you mentioned that the basic architecture
15 remains today, correct?

16 A. Well, it's obviously gone through many revisions and
17 countless man years have been put into optimizing and developing
18 it, including adding new features, but I think it's fair to say
19 that the basic concept that we've created in 2003 is what powers
20 the system today.

21 Q. So there's software that's installed on a host computer; is
22 that correct?

23 A. Yes.

24 Q. And that's the proprietary software that's offered by your
25 company, correct?

1 A. Yes, that's correct.

2 Q. Okay. What's the exception?

3 A. Well, there is it -- Join.me doesn't require software to be
4 installed. There is code that runs on the host computer, but
5 it's not actually installed. It disappears after you finish
6 your screen-sharing session.

7 Q. Okay. So taking into account either the code that's run on
8 the host computer or installed on the computer, what does that
9 code do?

10 A. It facilitates remote access to that computer in question.

11 Q. Does the host computer contact your datacenter servers?

12 A. The software, the LogMeIn software, yeah.

13 Q. And it does so periodically, correct?

14 A. Actually, when the data -- when the software is running, it
15 contacts the datacenter.

16 Q. And what's the purpose of contacting the datacenter?

17 A. To make the computer available for remote access.

18 Q. And how is the computer available for remote access?

19 A. The connection that's made from the host software to the
20 datacenter can be used by a component in the datacenter by a
21 system in the datacenter to exchange data with that computer.

22 Q. And how does that happen?

23 A. How do they exchange data?

24 Q. Yes.

25 A. As I've said earlier, the host computer initiates a

1 connection to the datacenter and that connection, when a
2 client -- the computer doing the accessing is the client.

3 Q. It's also a remote computer?

4 A. Our terminology is the client. The client is the computer
5 that's doing the accessing, and host is the computer that's
6 being accessed.

7 Q. Okay.

8 A. So essentially the client, the client computer is able to
9 connect to the host computer in question through the datacenter
10 utilizing that preexisting connection that the host computer
11 maintains.

12 Q. And the connection that the host computer maintains solves
13 the problem of traversing the firewall; is that correct?

14 A. That's a component of solving the problem, yes.

15 Q. How does it do that?

16 A. Well, I could give you a very long technical answer, but I
17 think you're looking for the simple explanation. It's that the
18 firewall inhibits inbound connections.

19 So the only way that you change information with the
20 computer that's behind the firewall without resorting to
21 reconfiguring the firewall is -- well, I shouldn't say the only
22 way, but the way that we are using our product is to utilizing a
23 connection that the computer behind the firewall makes to the
24 outside world.

25 Once that connection is established to a system which

1 is defined to facilitate communication through that connection,
2 then it becomes possible to exchange data with that computer.

3 Q. If the host computer's IP address changes, how does the
4 client then contact the host computer?

5 A. The client is not aware of the IP address of the host
6 computer. All the client needs is the ability to exchange
7 information with the host computer. It doesn't need IP address
8 information.

9 Q. And so how does it know how to contact the server?

10 A. So that's actually a pretty convoluted process, but -- well,
11 complex would be a more polite term.

12 The user, end user clicks on a computer on the LogMeIn
13 website that they wish to access, and the website uses the
14 database or requests that the database identify the gateway
15 server that the host that's being clicked on currently maintains
16 a connection with.

17 And once that gateway server has been identified by the
18 database cluster, the website directs the client, which is
19 typically a browser, but it can be something like Ignition, to
20 go and exchange information with the gateway.

21 Q. And the website that the client uses is what?

22 A. It's LogMeIn.com.

23 Q. And by virtue of the outgoing connection from the host
24 computer, data can be sent from the client through the gateway
25 back to the host computer; is that right?

1 A. That's right, yes.

2 Q. Does the host computer regularly communicate with the
3 gateway even if the client is not actively seeking to
4 communicate with the host?

5 A. Actually, it does.

6 Q. And how does it do so?

7 A. There is a simple keep-alive mechanism in the -- in this
8 protocol that requires that the host and the gateway exchange a
9 simple message that he doesn't see anything other than the
10 connection is alive.

11 And they are required to do it, I'm not sure about the exact
12 interval, but it's approximately once a minute. And if a -- and
13 if a message is missed, then the connection is presumed
14 unworkable.

15 Q. Okay. And the host computer's IP address must be included
16 in that keep-alive message somewhere in the TCP IP layer?

17 A. It actually is.

18 Q. Okay.

19 A. When I answered previously, I said the host software does
20 not include information. So on the application level -- on the
21 application level -- layer where our protocol is implemented,
22 there is no specific information about addressing.

23 But as anyone with background in networking would know, any
24 IP packet that is sent across the Internet has a source and a
25 destination address embedded in it. It's impossible to

1 communicate without this address information.

2 MR. CORRADO: Let's mark as the next exhibit

3 Plaintiff's Exhibit 41, a document bearing Bates numbers

4 LIM-E0238173 through --

5 Sorry. LIM-E0238173 through 8177.

6 MS. FERRERA: I have an objection, Your Honor, to the

7 exhibit and to the following question.

8 THE COURT: I'm sorry?

9 MS. FERRERA: I have an objection to the exhibit as
10 well as to the following testimony. The exhibit is irrelevant
11 and it's cross-examining the witness with somebody else's
12 document, which he's not -- a document he did not offer.

13 MR. CORRADO: Your Honor, there's been no objection to
14 this exhibit. The exhibit should stand in evidence. They've
15 never made an objection to it before today. It is certainly
16 relevant to addressing the problems that Mr. Anka and his team
17 were trying to solve at the time. And this exhibit explains
18 that. This is a memo from a member of that company who was
19 trying to solve certain problems. So it certainly is relevant
20 to what they knew and what -- the problems they were trying to
21 solve.

22 MS. FERRERA: Your Honor --

23 THE COURT: It's not his memo?

24 MR. CORRADO: It's not his memo, Your Honor, but he was
25 a member -- this is authored by a fellow -- we're going to get

1 into some testimony here and it's going to describe who the
2 fellow is. A member -- he's product development manager, and
3 Mr. Anka was the chief technology officer. And it's describing
4 meetings that occurred at LogMeIn to address certain problems
5 and the implementation.

6 The other thing I would point out is that Mr. Anka
7 described himself as the one who is responsible for all the
8 implementations. This document describes the -- the projected
9 implementation of the LogMeIn products and what they need to do
10 to solve certain problems. So it's certainly --

11 THE COURT: I think you're going to have to ask this
12 witness and not cross-examine him about somebody else's report
13 or exhibit. Objection sustained as to that.

14 MR. CORRADO: Your Honor, can I ask the questions
15 about -- the follow-up on this about the documents?

16 THE COURT: About what?

17 MR. CORRADO: Your Honor, I would like to ask the
18 questions of the witness at the deposition about the document
19 because it talks about who the author of the document was and
20 what they were discussing at the time. So even though the
21 document doesn't go in, his --

22 THE COURT: Well, if he got some information from the
23 document that he used, fine.

24 MR. CORRADO: Thank you, Your Honor.

25 MS. FERRERA: Your Honor, that's not what the testimony

1 indicates.

2 THE COURT: Well --

3 MS. FERRERA: And that's the objection we have. He's
4 using a document the witness didn't author.

5 THE COURT: Well, I've kept the exhibit out. Objection
6 overruled for these next few.

7 BY MR. CORRADO:

8 Q. Is this the type of document you would have seen in 2003?

9 A. I mean, I have no reason to believe it wasn't actually
10 authored by Tim Guest who is named here.

11 Q. Who is Tim Guest?

12 A. Tim Guest has been with us for a long time. He is -- I
13 think his current title is project manager.

14 Q. It seems that you were aware that GoToMyPC had a ping of
15 every two seconds, that you were contemplating a ping of every
16 1.8 seconds.

17 Do you see that? Page 96.

18 MS. FERRERA: Your Honor, this testimony was withdrawn
19 so it's beyond --

20 MR. CORRADO: Your Honor, he's talking about what they
21 were contemplating at the company at the time. And this is the
22 witness himself who's talking about what the company was
23 discussing.

24 THE COURT: Which objection? Did you say it was
25 withdrawn?

1 MS. FERRERA: Yeah, they told us that they were
2 withdrawing this designation, Your Honor.

3 THE COURT: Well, then how do I resolve that? They
4 obviously didn't withdraw it, did they?

5 MR. CORRADO: Your Honor, we withdrew certain
6 designations last night. They were not these designations. And
7 I don't know of any other designations.

8 MS. FERRERA: It was like -- I'm sorry. It was prior
9 to this. There was an e-mail where you withdrew certain
10 designations and this was one of them.

11 THE COURT: Well, let's see the e-mail. If they
12 withdrew it, why we'll -- I'll sustain the objection.

13 Mr. Corrado, if it's withdrawn, it's withdrawn.

14 MR. CORRADO: Your Honor, I believe that's correct. It
15 was withdrawn. I apologize to the Court.

16 BY MR. CORRADO:

17 Q. How would the company have known that GoToMyPC had a ping of
18 every two seconds?

19 A. We have -- I have been a GoToMyPC customer since, I don't
20 know, 2002, something like that, but I don't know how Tim Guest
21 would have come to realize that GoToMyPC pings every two
22 seconds. I don't know if it's accurate either.

23 Q. If you wanted to find out how often GoToMyPC pings, would
24 that be something you would know how to do?

25 A. Yeah. Any engineer could, you know, packet trace

1 application and see what's occurring over the network.

2 Q. Now, your general system architecture, was that an idea that
3 you had ever considered patenting?

4 A. Not our general system architecture, no.

5 Q. Why not?

6 A. We did ultimately patent aspects of the architecture, but
7 the general architecture is -- the general architecture itself
8 is -- you know, I don't think that's particularly unique.

9 There have been servers prior to us creating LogMeIn that
10 have done -- that have solved the problem, solved a similar
11 problem and without -- the general idea itself is probably not
12 patentable.

13 Q. So exhibit -- Plaintiff's Exhibit 53 has been marked, and
14 it's a document bearing Bates numbers LIM-E0001978 through 1991.
15 And Exhibit 6 is a LogMeIn security paper.

16 Mr. Anka, do you recognize these two documents?

17 A. Oh, absolutely.

18 Q. Let me ask you about exhibit -- Plaintiff's Exhibit 53
19 first.

20 A. Sure.

21 Q. What is it?

22 A. It's a security white paper that we had published. It
23 indicates that you are the -- well, excuse me.

24 Q. It indicates that you're the author; is that correct?

25 A. That's right, yes.

1 Q. And it indicates that it was written in 2004?

2 A. That's what the date is, yes.

3 Q. Is that correct?

4 A. I think so. When I opened it further, I didn't recognize
5 the heading it's so old. We had a number of revisions of this
6 paper since.

7 Q. To which LogMeIn products did this paper apply?

8 A. I have to check. Definitely LogMeIn Pro.

9 MS. FERRERA: Your Honor, we would like to read the
10 rest of the answer, which starts at line 25 at the bottom of
11 that page and continues to line 7 on the top of the next page.

12 BY MR. CORRADO:

13 Q. Go ahead.

14 A. The document only mentions LogMeIn, which I take that to
15 mean that this actually predates the time when we had multiple
16 products under the LogMeIn name, so I'm pretty sure this is the
17 first version. It's supposed to describe the first version of
18 the LogMeIn product.

19 Q. And that was LogMeIn Pro?

20 A. Which was LogMeIn Pro, yes.

21 Q. Released in 2004, in April?

22 A. April 13th.

23 Q. And the time the product was released in April 2004, what
24 was the official name?

25 A. We kept referring to it as LogMeIn Pro, but this document

1 here just calls it LogMeIn so we may have called it just
2 LogMeIn.

3 The differentiation is as we discussed earlier, LogMeIn Free
4 was launched in the fall of 2004, and we may have started to
5 differentiate then and using the Pro name too.

6 Q. Well, again, just if you were to explain what IT Reach is,
7 how would you do so?

8 A. Okay. So if you take Remotely Anywhere, which is our
9 LAN-based hardcore system administrator toolbox, it had a
10 certain targeted audience, technical people, very highly
11 technical people.

12 LogMeIn, both Free and Pro, were marketed at people who
13 weren't particularly technically savvy.

14 And IT Reach was essentially LogMeIn Pro extended with some
15 of the -- well, almost all of the system administrative features
16 that you would find in Remotely Anywhere but delivered through
17 the LogMeIn system.

18 Q. I see. And then it ceased to exist in its separate form in
19 2009 when it was rolled with LogMeIn Pro into the Pro2 product?

20 A. That's correct.

21 MS. FERRERA: Your Honor, we would like to read the
22 next question, which starts at page -- or starts the same page,
23 lines 12 through 16, and the answer on the next page, lines 7
24 through 25.

25 MR. CORRADO: 7 through 25?

1 MS. FERRERA: Right.

2 MR. CORRADO: Your Honor, again, we're getting to the
3 point here where we're adding material from the defendant's case
4 into our case and so I would object to reading those. They can
5 certainly follow up --

6 THE COURT: She's not asking for that much. Let's keep
7 it all together.

8 BY MR. CORRADO:

9 Q. And then it ceased to exist in its separate form in 2009
10 when it was rolled with LogMeIn Pro into the Pro2 product.

11 A. That's right.

12 Q. Taking a look at Exhibit 53, which is the 2004 security
13 white paper that you wrote, is there anything in there that was
14 not accurate at the time that you wrote it or today?

15 A. I had the time to read through the two documents quickly.
16 And, you know, I believe that their contents are accurate. But
17 if I may qualify that.

18 The documents are meant to describe the security aspects of
19 the LogMeIn service and the LogMeIn products in a high amount of
20 detail. But the documents don't really go into explaining how
21 the system itself works.

22 So when, on one hand, it's a fairly technical and highly
23 accurate description of the system from a security perspective,
24 as far as how the system is actually architected and how the
25 system is designed, there's not much information that -- not

1 much technical information that one can actually glean from
2 these documents.

3 Q. But the information that's presented in those documents is
4 accurate to the best of your knowledge?

5 A. It's accurate, sometimes a bit too general, but accurate.
6 That's right.

7 Q. Okay. With respect to any of the accused products, have any
8 of them won awards that you're aware of?

9 A. Yeah, yeah. Off the top of my head, we had a *PC Magazine*
10 Editors' Choice Award in remote access software roundup in 2005,
11 which was our first major win with LogMeIn.

12 Q. Which product was that?

13 A. It was the LogMeIn product. I can't tell you if they tested
14 LogMeIn Free or LogMeIn Pro or both, but they did like the
15 software.

16 And just more recently, last year, LogMeIn Ignition was
17 named iPad App of the Year by Macworld. It may have been the
18 Macworld UK, which doesn't count as much.

19 MS. FERRERA: We would like to just read the rest of
20 that answer, Your Honor, on page 119, 1 through 10.

21 BY MR. CORRADO:

22 Q. Go ahead.

23 A. I don't know if this counts as an award, but Apple announced
24 that LogMeIn Ignition was the highest grossing iPad app not made
25 by Apple itself. I don't know if -- technically, that's

1 probably not an award, but it's definitely a nice mention.

2 Like I said, off the top of my head, that's about it. There
3 is more, I'm sure there is more.

4 Q. And I take it that you consider the product to be successful
5 as well?

6 A. I certainly do. Yes.

7 Q. In what way?

8 A. In two different ways. It's hard to argue with the
9 financial success that the company has enjoyed and, you know,
10 since we sell software and service, that's obviously due to our
11 software and services.

12 And then there are the millions and millions of users who
13 actually use our free products and are generally very grateful
14 for it as they express it in e-mails.

15 So, yeah, I think it's been successful.

16 Q. Do you recall whose idea it was to offer a free product?

17 A. It was actually mine.

18 And my idea -- which sounded good to me, but what I -- what
19 do I know? Like I said, I'm a technologist -- was that we could
20 create and give away a free version of our LogMeIn product and
21 hope that a certain percentage of users actually buy a premium
22 version.

23 Q. Mr. Anka, have you seen Plaintiff's Exhibit 1, which is the
24 patent, before?

25 A. I certainly have.

1 Q. When was the first time you became aware of the '479 patent?

2 A. I believe it's late February in 2006.

3 Q. Okay. And what were the circumstances of you becoming aware
4 of the '479 patent?

5 A. The news of 01 suing Citrix broke in that time period. And
6 our PR person, Joe Eckert, he sent a short article around about
7 the lawsuit. There really wasn't much factual information other
8 than the fact the 01 sued Citrix under a patent.

9 And that's when I went and downloaded the patent text from
10 the PTO's website.

11 Q. And you read through the patent at the time; is that right?

12 A. I believe I have, yes.

13 Q. You had?

14 A. Yeah.

15 Q. So what did you do next with respect to the '479 patent?

16 MS. FERRERA: Your Honor, this testimony again has been
17 withdrawn.

18 MR. CORRADO: It has, Your Honor.

19 BY MR. CORRADO:

20 Q. Before contacting your --

21 MS. FERRERA: Your Honor, this is part of the testimony
22 too.

23 MR. CORRADO: The withdrawal was from 11 to 16. I am
24 now reading line 16 through 19.

25 MS. FERRERA: Well, it included line 16.

1 MR. CORRADO: I'll leave out the -- the first line.

2 BY MR. CORRADO:

3 Q. Attorneys, were you at all concerned that the company was
4 infringing its patent?

5 A. Concerned? I was curious.

6 Q. You were curious as to whether the company was infringing
7 the patent?

8 A. No. I was curious what the OI and Citrix litigation really
9 meant for LogMeIn.

10 Q. And what do you mean by that?

11 A. Well, to elaborate, you have a space which is the remote
12 access space, you have a clear market leader, Citrix, and you
13 have few other companies who are trying to compete in this
14 space. And those few other companies, there really weren't too
15 many. There was Laplink, there was WebEx, there was OI, there
16 was LogMeIn.

17 So one company suing the other over a patent, you know, you
18 definitely want to know what that means, right?

19 Q. Plaintiff's Exhibit 48, have you seen this document before?

20 A. I believe I have, yes.

21 Q. I'm going to ask --

22 MS. FERRERA: Objection, Your Honor. We had -- again,
23 counsel is cross-examining the witness with someone else's
24 document. I don't think we actually have that document.

25 THE COURT: What's the document?

1 MR. CORRADO: Your Honor, it's Plaintiff's Exhibit 46.
2 There's been -- 48. I'm sorry. There's been no objection
3 registered to this exhibit in the course of -- of this entire
4 litigation. The first time I've heard an objection to this
5 exhibit is this morning.

6 MS. FERRERA: Yeah. My objection is actually to the
7 testimony, Your Honor, which we have objected to.

8 THE COURT: Well, whose -- I still don't know. But
9 Exhibit 147 means nothing to me. What is it? Is it somebody
10 else's statement or something? You say you're cross-examining
11 from somebody else. Whose is it?

12 MR. CORRADO: Your Honor, it's the -- it's the 10-K for
13 the company, which I have. It's -- it's Plaintiff's Exhibit 48,
14 which was used in Mr. Anka's deposition. It's LogMeIn's form
15 10-K. I think certainly we can ask the witness about --

16 THE COURT: What's a 10-K filed for?

17 MR. CORRADO: I'm sorry, Your Honor?

18 THE COURT: What's a 10-K form?

19 MR. CORRADO: What's it for?

20 THE COURT: What is a 10-K form?

21 MR. CORRADO: Your Honor, it's a filing for the --
22 as -- for the United States Securities and Exchange Commission.

23 THE COURT: All right. Objection overruled.

24 BY MR. CORRADO:

25 Q. Have you seen this document before?

1 A. I believe I have, yes.

2 Q. I'm going to ask you a question with respect to text on
3 page 10.

4 A. Okay.

5 Q. Okay. And the last paragraph, the text reads: We believe
6 our large user base also gives us an advantage over smaller
7 competitors and potential new entrance into the market by making
8 it more expensive for them to gain general market awareness.

9 Do you see that sentence?

10 A. Yes.

11 Q. And is that an accurate sentence?

12 A. It's not my statement. Are you asking me if I agree with
13 the statement?

14 Q. Let me ask you this. Do you have any reason to believe that
15 it's an untrue statement?

16 A. No. I think it's a sound argument.

17 MR. CORRADO: Marked as exhibit -- Plaintiff's
18 Exhibit 46, a document bearing Bates numbers LIM-E0320704
19 through 708.

20 MS. FERRERA: Your Honor, we have an objection to the
21 exhibit as well as to the testimony that follows. The exhibit
22 is completely irrelevant. It -- it talks about a different
23 company. It talks about a different product. It has nothing to
24 do with the issues in this case.

25 MR. CORRADO: Your Honor, the -- the objections -- this

1 is Mr. Anka's own e-mail which he authored and sent to other
2 members of the company. It talks about their intention of using
3 the free model and explains the purposes that they believe
4 offering the LogMeIn Free for free will have on competitors. So
5 I think it is entirely relevant to how they are using this
6 business model.

7 THE COURT: Objection overruled. He's already
8 testified to that.

9 BY MR. CORRADO:

10 Q. Have you seen this document before, Mr. Anka?

11 A. I'm pretty sure I have. It's an e-mail that I sent, so ...

12 Q. In the next paragraph you state that users always seem to
13 find the path of least resistance.

14 A. Mm-hmm.

15 Q. Then you state: We've been taking advantage of this with
16 LMI Free for years now.

17 A. Mm-hmm.

18 Q. And then in the third paragraph you talk about, quote,
19 destroying Team Viewer and putting our German friends out of
20 business.

21 I assume that refers to Team Viewer as well?

22 A. That's right.

23 MS. FERRERA: And, Your Honor, we would like to read
24 the next question, which starts at line 7 on the same page and
25 the answer that goes through line 4 on the next page.

1 THE COURT: All right.

2 BY MR. CORRADO:

3 Q. And the question for you is, was the way in which to destroy
4 Team Viewer and put them out of business by offering --

5 A. A better product. I'm sorry. I'll let you finish the
6 question.

7 Q. -- by offering a product for free?

8 A. At that point there was no conclusion about exactly how we
9 were going to beat them.

10 But I recall the second paragraph. To me this is all about
11 the path of least resistance. You have to provide some
12 combination of either better pricing, better functionality,
13 better ease of use, a better-looking product. Ideally you need
14 a combination that is going to be better, significantly better
15 than what other companies are offering.

16 Q. And then in the last sentence you say, quote, that's why I'm
17 not enthusiastic, to say the least, about trying to turn
18 Express -- and that's Join.me?

19 A. Express was Join.me's first -- yeah, that's right.

20 Q. -- Express into a pay-for product on any level, at least not
21 until it's done its job and put our German friend out of
22 business.

23 A. Yeah.

24 Q. And there you're referring to keeping Express Free?

25 A. That's right, yes.

1 Q. How many datacenters does LogMeIn maintain?

2 A. Four as of right now.

3 Q. What systems do the datacenters contain?

4 A. It slightly varies from datacenter to datacenter. Actually,
5 let me answer that.

6 We have two kinds of datacenters. We have so-called main
7 datacenter -- three kinds of datacenters; main datacenter, a
8 fail-over datacenter, and the satellite datacenter.

9 The task of the main datacenter is everything that satellite
10 centers do, plus it houses our database clusters.

11 The fail-over datacenter is identical in terms of the
12 hardware configuration. It also has database servers, but it
13 does not -- the databases are standby. This is done in order
14 for disaster recovery. Should we lose the active datacenter,
15 the main datacenter, the fail-over datacenter can take its role.

16 The satellite datacenters do not have database servers.
17 They have web servers that comprise of a web server cluster and
18 they have application servers or gateway servers that comprise a
19 gateway cluster.

20 MR. CORRADO: I'm moving now to the deposition taken
21 February 4, 2011, at page 6.

22 BY MR. CORRADO:

23 Q. So which products did you review the source code for?

24 A. LogMeIn Free, Pro, IT Reach, and obviously the components
25 that make up the products.

1 Q. What do you mean by the components that make up the
2 products?

3 A. Well, as you know, there is the LogMeIn software that we
4 distribute to end users, and there is the LogMeIn software that
5 runs in our database server, that runs in our database cluster,
6 the LogMeIn software that runs in our gateway, the LogMeIn
7 software that runs in our website. These are the main
8 components that I've been focusing on.

9 Q. Did you also look at the source code for Ignition product?

10 A. I did not specifically, no.

11 Q. Any reason why not?

12 A. The reason being is that Ignition access a client. So from
13 the perspective -- Ignition isn't different from a remote access
14 perspective than a browser would be. It interacts with the same
15 interfaces that a regular browser which is the standard mode
16 access client for LogMeIn is.

17 Q. Did you look at the source code for Join.me?

18 A. Again, not in particular. The reason being is that Join.me
19 shares the same architecture with LogMeIn from the perspective
20 of establishing a remote connection between the two computers
21 that exchange information with each other.

22 Q. Okay. I understand that LogMeIn Free, Pro, and IT Reach
23 share the same source code and physically are the same binaries,
24 correct?

25 A. That's correct.

1 Well, IT Reach is no longer a product of ours, but the
2 answer is yes, when we had a product IT Reach, it was the same
3 binary as well as LogMeIn and LogMeIn Pro.

4 And now we only have LogMeIn Free and LogMeIn Pro. They are
5 built from the same source code and they are the same binaries.

6 Q. Where is the database --

7 THE COURT: It's time to take a recess.

8 (Recess taken at 11:32 a.m.; back on the record at
9 11:48 a.m.)

10 MR. CORRADO: Your Honor, if I could take just a minute
11 to talk about the exhibit we talked about earlier, Plaintiff's
12 Exhibit 41. We understand Your Honor's ruling that we should
13 not cross-examine a witness on a document he didn't author, but
14 that exhibit should be admitted into evidence.

15 The -- the document was part of our exhibits that we
16 proffered at pretrial. The local rule in this court is that
17 unless there's an objection stated to an exhibit, it stands in
18 evidence. That's been the practice of this Court for as long as
19 I can remember. There was no objection that was --

20 THE COURT: I thought there was an objection made.

21 MR. CORRADO: Not at the time. The objection was first
22 made this morning. It's really a sandbagging. If we had known
23 that there was an objection to that document --

24 THE COURT: Then I misunderstood. There's no objection
25 made before this morning?

1 MR. CORRADO: That's right, Your Honor.

2 THE COURT: Then -- is that correct?

3 MS. FERRERA: Your Honor, we objected to the deposition
4 testimony, but not to the document.

5 MR. CORRADO: No objection to the exhibit.

6 THE COURT: It's admitted then.

7 THE CLERK: What number was that?

8 THE COURT: What number was that?

9 MR. CORRADO: Plaintiff's Exhibit 41. I move the
10 admission of that exhibit at this time. I move the admission of
11 all of the exhibits that we've talked about so far that had not
12 been objected to. I think that's all the exhibits we've talked
13 about.

14 THE COURT: Which ones are those? That's not helpful.

15 MR. CORRADO: Your Honor, I have a list of documents,
16 and I'll give those to you in a minute.

17 THE COURT: All right. I'll admit them.

18 MR. CORRADO: It's Exhibits 41, 53, 48, and 46.

19 THE COURT: All right. They're admitted.

20 MR. CORRADO: Thank you, Your Honor.

21 THE COURT: Ready for the jury.

22 (The jury enters at 11:51 a.m.)

23 THE COURT: All right.

24 MR. CORRADO: Page 22.

25

1 DIRECT EXAMINATION (continued)

2 BY MR. CORRADO:

3 Q. Where is the database cluster?

4 A. You mean physically?

5 Q. Yes.

6 A. It's -- I believe right now it is in Ashburn, Virginia.

7 Q. Is there only one?

8 A. There are several.

9 Q. Are there several in Ashburn?

10 A. Yes. Essentially there are several clusters each
11 responsible for filling a particular role, and the ones that are
12 currently used are all in Ashburn.

13 Q. Now, on the client side, does certain software get
14 downloaded onto the client computer or the client device?

15 A. It's a possibility, but to get into a remote access session,
16 you don't need to download any software.

17 Q. When you say it's a possibility, what do you mean?

18 A. LogMeIn has created components that allow for certain
19 functions to be faster, and those components are implemented in
20 various programming languages, and those components can be
21 optionally downloaded if the user so chooses.

22 MR. CORRADO: Turning to the January 23, 2013,
23 deposition of Mr. Anka, page 12.

24 BY MR. CORRADO:

25 Q. With respect to the redesign, can you tell us what the

1 changes are?

2 A. Mm-hmm. Yes. So the functionality that's been added to the
3 gateway covers the detecting IP address changes on the gateway
4 server and handling those IP address changes.

5 MS. FERRERA: Your Honor, I'd just like to read the
6 prior few lines which were part of the same answer starting at
7 line 16 through 23.

8 MR. CORRADO: Go ahead.

9 THE WITNESS: The changes, you know, they -- they --
10 what -- what -- what the changes are in terms of functionality
11 in -- in the source code or -- what do you mean by the changes
12 that -- it's kind of a broad --

13 BY MR. CORRADO:

14 Q. Sure. We can start with the functionality.

15 A. Mm-hmm. Yes. So the functionality that's been added to the
16 gateway covers detecting IP address changes on the gateway
17 server in handling those IP address changes.

18 Q. Okay. And the change to the source code with respect to
19 this functionality is only with the gateway servers and not the
20 other types of servers that LogMeIn uses; is that right?

21 A. That's -- that is correct.

22 Q. Okay.

23 A. The -- the only change that's been -- the only change that
24 requires source code changes were in the gateway.

25 Q. Does the new gateway source code change the way that the

1 gateway interacts with the database servers to the web servers?

2 A. No. No, it doesn't.

3 Q. And what was your role with respect to the revised gateway
4 source code?

5 A. Mm-hmm. Well, the source code itself, not -- not much. The
6 process itself, I came up with the idea and presented a
7 high-level design in a verbal meeting. That's about the extent
8 of my involvement.

9 Q. When did you first have the idea for this redesign?

10 A. I can't tell you that precisely. But it was -- it was
11 sometime in the fall of last -- oh, of -- sorry -- the fall of
12 2010.

13 MR. CORRADO: Turn to page 28, please.

14 BY MR. CORRADO:

15 Q. Mr. Anka, can you just identify for the record what -- what
16 exhibit -- Plaintiff's Exhibit 239 is?

17 A. It's a short document with -- with a few dates on it that
18 show when the workaround was put in place in each of our
19 datacenters and when it was taken offline and then when it was
20 reinstated.

21 Q. And did you create this document?

22 A. I -- I actually did not. It was handed to me by -- by our
23 attorneys. And I could have created it myself --

24 Q. Okay.

25 A. -- if I wanted to.

1 Q. To the best of your knowledge, is it accurate?

2 A. Yes.

3 MR. CORRADO: Your Honor, there's been no objection to
4 Plaintiff's Exhibit 239. I move its admission.

5 THE COURT: It's admitted.

6 MR. CORRADO: Page 32.

7 BY MR. CORRADO:

8 Q. Do you know why it's broken into -- the document is broken
9 out into the first implementation and second implementation?

10 A. Well, it is because the first implementation was
11 essentially -- we essentially ended that at the dates set forth
12 in the document, in August of -- of 2011.

13 Q. When you said and ended that, you're talking about ended the
14 implementation?

15 A. That's correct, yes.

16 Q. Okay. And then did you go to some other implementation?

17 A. Yes.

18 Q. What was that?

19 A. That's right. We went back to static IP addresses on -- on
20 the servers.

21 MR. CORRADO: Page 42.

22 BY MR. CORRADO:

23 Q. And how, if at all, did the second implementation differ
24 from the first implementation?

25 A. It -- it runs on more servers because -- because we added

1 more servers, but other than that, the implementation is the
2 same.

3 Q. Okay. So the implementation affected Free, Pro, Ignition,
4 IT Reach, and Join.me?

5 A. That's correct.

6 Q. So there's certain LogMeIn software running on that host
7 computer, correct?

8 A. Yes.

9 Q. And that's the same software under the original
10 implementation and the new implementation; is that right?

11 A. With regards to the -- to the redesign, there have been no
12 changes.

13 MS. FERRERA: Your Honor, I would just like to read the
14 next -- the rest of that answer, which is page 55, lines 2
15 through 7.

16 THE WITNESS: It's not the same software as it was in
17 2010 or '11 or even, well, in 2012. We went through a couple of
18 updates, but those were adding functionality and fixing bugs,
19 not -- not related to -- to the issue at hand.

20 BY MR. CORRADO:

21 Q. Do you recall updating the executive team on the
22 implementation -- new implementation?

23 A. I actually don't. I know I updated our CEO and definitely
24 Mike Donahue. I don't think anyone else would have had a reason
25 to receive an update.

1 Q. Okay. And then the same question with respect to the
2 stopping of the first implementation.

3 A. Right. Right.

4 Q. Who would you have provided an update to?

5 A. Mike, Mike Donahue. Yeah.

6 Q. And Michael Simon?

7 A. Well, I -- I don't think so. In fact, I'm pretty sure, no.

8 Q. And with respect to the second implementation, who would you
9 have reported that to?

10 A. Mike Donahue definitely, and I think that's -- that's it.

11 MR. CORRADO: Thank you, Mr. Anka.

12 THE COURT: All right.

13 (Witness stands down.)

14 THE COURT: Who's next?

15 MR. SETH: Good morning. Our next witness is
16 Dr. Andrew Grimshaw.

17 THE COURT: Dr. Who? I'm sorry.

18 MR. SETH: Grimshaw.

19 **DR. ANDREW GRIMSHAW,**

20 after having been duly sworn or affirmed,
21 took the stand and testified as follows:

22 DIRECT EXAMINATION

23 BY MR. SETH:

24 Q. Dr. Grimshaw, good morning. Could you please state your
25 name for the record.

1 A. Dr. Andrew Grimshaw.

2 Q. You've been retained as an expert for 01 in this case?

3 A. I have.

4 Q. What were you asked to do?

5 A. I was asked to look at the LogMeIn implementation and
6 determine whether it infringed on the '479 patent.

7 Q. Before I ask you about your opinions, I'd like to begin with
8 a few questions about your background. Where you are --

9 THE COURT: Do you have a curriculum vitae?

10 MR. SETH: We do.

11 THE COURT: Well, you can mark that and have it
12 admitted.

13 Do you have any questions about his qualifications?

14 MR. STONER: No, Your Honor.

15 THE COURT: Just go directly to your substantive
16 questions, and I'll mark his curriculum vitae for the jury to
17 look at.

18 MR. SETH: Okay. Would it be all right for
19 Dr. Grimshaw to introduce himself to the jury?

20 THE COURT: He already has. Just ask your questions.

21 BY MR. SETH:

22 Q. Dr. Grimshaw, have you formed an opinion as to whether the
23 LogMeIn remote access system meets every element of claim 24 of
24 the '479 patent?

25 A. I have. I've come to the opinion that the LogMeIn remote

1 access product infringes every claim element of claim 24 of the
2 '479 patent.

3 Q. Okay. Before we get into the details of your analysis, I'd
4 like you to describe in general the terms of the principal parts
5 of the LogMeIn system.

6 Dr. Grimshaw, would you please take a look at Plaintiff's
7 Exhibit 168?

8 A. Yes.

9 Q. Do you have that in front of you?

10 A. I do.

11 Q. Do you recognize this document, Dr. Grimshaw?

12 A. I do.

13 Q. What is it?

14 A. It's the LogMeIn security white paper.

15 Q. Did you rely on this document in your infringement analysis?

16 A. It's one of the documents I relied on in my infringement
17 analysis, yes.

18 Q. What does it describe?

19 A. This describes the overall LogMeIn architecture with a
20 particular emphasis on security architecture. It defines what
21 the component parts are and how they interact at a very high
22 level.

23 Q. Okay. What did you specifically rely on?

24 A. I relied on, well, the entire document, but Fig. 1 of the
25 document is a particularly good description of the high-level

1 view of the LogMeIn architecture and it sets the context for
2 much of the later discussion.

3 MR. SETH: I'd like to move Exhibit 168 into evidence.

4 MR. STONER: No objection.

5 THE COURT: It's admitted.

6 BY MR. SETH:

7 Q. Dr. Grimshaw, you prepared a demonstrative exhibit to help
8 you illustrate the LogMeIn remote access system?

9 A. I did. I took Fig. 1 from the document and we put it up on
10 a board.

11 MR. SETH: Your Honor, request permission to show
12 Grimshaw demonstrative Exhibit No. 1.

13 BY MR. SETH:

14 Q. Dr. Grimshaw, what is shown on this diagram?

15 A. So what I'd like to do is start at the upper left-hand
16 corner of the document -- of the figure, by the way, and that's
17 where we see the client computer. And the client computer is
18 the computer from which you're going to connect a personal or
19 host computer. It may or may not be behind a firewall or a
20 network address translator or Internet proxy.

21 Down in the lower right-hand corner is the host computer or
22 the personal computer. This is the thing that you want to
23 actually access. So, for example, my machine at home in
24 Charlottesville might be this computer or a perhaps a machine at
25 the office.

1 In the middle is the LogMeIn server, as they called it, the
2 datacenter. And it consists of multiple subcomponents of the
3 LogMeIn.com, which directly deals with web services, LogMeIn
4 database, and LogMeIn gateway. So these are the three primary
5 devices or components in that. In between each of these, you
6 see the blue earth thing, which is their representation of the
7 Internet. In fact, it even says that.

8 MR. SETH: Okay. We can take down the demonstrative.
9 Thank you, marshal.

10 BY MR. SETH:

11 Q. Does LogMeIn have more than one commercial product involved
12 in the remote access technology?

13 A. Yes, they do.

14 Q. What are those accused LogMeIn commercial products?

15 A. So there's LogMeIn Free, there's LogMeIn Pro, there's
16 LogMeIn Pro2, IT Reach. There's a Join.me and there's LogMeIn
17 Ignition.

18 Q. Could you generally describe for us what those products are?

19 A. So all the products have a common core infrastructure which
20 is developed around the idea of providing remote access to these
21 host computers. And specifically, they provide access to host
22 computers, regardless of whether they have a dynamic IP address
23 or not or whether they have a publicly addressable IP -- a
24 publicly addressable IP address or not.

25 Q. Okay. So could you describe the product, please?

1 A. Yes. So let's take a LogMeIn Pro or LogMeIn Free, which
2 we'll be seeing in a minute, I hope. The basic idea there is
3 that a program is running on the host computer that comes from
4 LogMeIn, and then you go to their web page and you can select a
5 machine among the ones that you have the ability to select and
6 select it. And what it really does is it then gives you a
7 remote desktop on that machine.

8 So it's as if I was sitting at my home computer, but in fact
9 I'm in Dulles Airport or somewhere like that. I can edit files,
10 I can use the mouse, I can do anything I can do sitting at home
11 but from a remote computer.

12 That's the essence of their products, to provide that kind
13 of capability, whether it's with Join.me, where people can see
14 my computer, or the Pro versions of LogMeIn.

15 Q. Okay. And what about LogMeIn Pro?

16 A. So LogMeIn Pro adds some additional premium features that
17 LogMeIn Free doesn't have. And it's -- well, that's what it
18 does.

19 Q. Okay. And what about IT Reach?

20 A. IT Reach is really more of a management tool. As the
21 deposition that Dr. Anka had earlier said, it's really targeted
22 at more IT managers.

23 Q. What about Pro2?

24 A. Pro2 includes many of these features into the Pro.

25 Q. And Ignition?

1 A. Ignition is a product for tablets and mobile devices. So
2 it's, for example -- and it's designed to exploit the different
3 characteristics that those devices have. So it's, for example,
4 for iPads or for Android devices such as a tablet or my son's
5 cell phone.

6 Q. And what about Join.me?

7 A. Join.me is a remote desktop sharing application. It can be
8 used to essentially share your screen out with several other
9 people so that they can see it.

10 Q. Okay. Now, do each of these LogMeIn commercial products use
11 the same remote access technology?

12 A. They all use the underlying technology to provide the remote
13 access capability.

14 Q. How do you know that?

15 A. Well, I know that for lots of different reasons. So, first
16 off, you know, some of the documentation alludes to that fact.
17 Secondly, when you look at the source code, they have this core
18 feature of stuff all in one place that handles that capability.

19 Then, finally, Mr. Anka said it in his deposition himself.
20 He said they all use the same underlying technology.

21 Q. Okay. Beyond the security white paper, what else did you
22 consider on ultimately concluding that there was infringement by
23 the LogMeIn remote access system?

24 A. Well, I looked at many different documents provided by
25 LogMeIn or that I found online. I looked at the source code and

1 looked at that -- and then I also did a lot of experiments on my
2 own system using the LogMeIn system to verify what the
3 documentation said and to verify that that was in fact
4 consistent.

5 So I had a number of different pieces of evidence that were
6 all mutually consistent and told me that, in fact, it was, A,
7 behaving as it was documented; and, B, that it actually was
8 there for infringing.

9 Q. And did you use the systems also?

10 A. Yes. I used LogMeIn Free and LogMeIn Pro and I used
11 Join.me. I used Ignition on my son's cell phone because I
12 didn't have a smartphone myself, and that's when I used it that
13 way.

14 Q. Was there anything you considered that was not consistent
15 with your finding of infringements?

16 A. Well, like I said, the -- the evidence was all mutually
17 consistent and -- and there's nothing that was sort of like, you
18 know, I don't understand why that's that way. There was nothing
19 like that.

20 Q. Okay. First, regarding the LogMeIn source code, which is
21 contained on PX 149 and 150, have you analyzed that source code
22 for each of the LogMeIn accused commercial products?

23 A. Yes. I've analyzed that source code for each of the
24 products.

25 Q. Okay. And with respect to the demonstrative 1 that we had

1 up, please, did the source code that you analyzed include code
2 for the host computer?

3 A. Yes, it did include code for the host computer.

4 Q. Did it include code for the remote computer, client
5 computer?

6 A. It did include that, including the Ignition code which was
7 from the client computers.

8 Q. And did it include code for the server computers?

9 A. It included code for the server computers, the gateway, the
10 database, and the web servers, yes.

11 Q. Dr. Grimshaw --

12 A. Yes.

13 Q. -- how did you use the source code in your analysis?

14 A. Well, so the first thing is you have to unpack it and unload
15 it. I used standard tools that you would use for that sort of
16 thing. I used grep. I used -- I used grep and several other
17 tools. I also used Eclipse, which is a integrated development
18 environment. It's really a nice tool because it lets you
19 essentially suck up the source and helps you find stuff when
20 you're looking for it.

21 Q. Okay. Are you going to specifically discuss a source code
22 for us?

23 A. No, I'm not. The source code is pretty technical. If you
24 don't understand the various languages, it can be -- it can
25 really look like a bunch of jibber. So I'm not planning to

1 discuss the source code.

2 Q. Now, in addition to analyzing the source code using the
3 system, did you review any LogMeIn documentation in forming your
4 opinions?

5 A. I reviewed many pieces of LogMeIn documentation. I reviewed
6 user guides. I reviewed FAQs, the security white papers.
7 Actually, there are several versions of the security white
8 paper. And then I also looked at the little documentation that
9 was actually in the code itself.

10 Q. Let me show you PX 160.

11 A. Yes.

12 Q. Do you recognize this document?

13 A. I do.

14 Q. What is it, please?

15 A. It's the LogMeIn Free user guide.

16 Q. Did you rely on this document in your infringement analysis?

17 A. Yes. I read it the first time around to make sure I was
18 doing everything right.

19 MR. SETH: Your Honor, I'd move PX 160 into evidence.

20 MR. STONER: No objection.

21 THE COURT: It's admitted.

22 BY MR. SETH:

23 Q. Let me show you PX 169.

24 A. Yes, I have it in front of me.

25 Q. Do you recognize this document?

1 A. I do.

2 Q. What is it?

3 A. It's the LogMeIn Free and Pro user guide.

4 Q. And did you rely on this document in your infringement
5 analysis?

6 A. Yes, I did.

7 Q. And how did you rely on it?

8 A. Once again, I read the document to understand how it was
9 describing that things worked and reinforced what the other
10 document had said.

11 MR. SETH: I'd move PX 169 into evidence.

12 MR. STONER: No objection.

13 THE COURT: It's admitted.

14 BY MR. SETH:

15 Q. Let me show you PX 60.

16 A. Yes, I have it in front of me.

17 Q. Do you recognize this document?

18 A. Yes, I do.

19 Q. What is it?

20 A. It's the LogMeIn Pro2 user guide.

21 Q. Did you rely on this document in your infringement analysis?

22 A. I did.

23 Q. How?

24 A. Well, I -- similar to the other documents, I looked at it to
25 make sure that I was understanding how to use things properly,

1 such as the remote control feature and how to connect, things
2 like that.

3 MR. SETH: I'd move to admit PX 60 into evidence.

4 MR. STONER: No objection.

5 THE COURT: It's admitted.

6 BY MR. SETH:

7 Q. Please turn to PX 57. Do you recognize this document?

8 A. Yes, I do.

9 Q. And could you identify it, please?

10 A. It's the LogMeIn Ignition user guide.

11 Q. Did you rely on this document in your infringement analysis?

12 A. I looked at it to see what it described and how it described
13 it, yes.

14 Q. Okay.

15 MR. SETH: I move PX 57 into evidence.

16 MR. STONER: No objection.

17 THE COURT: It's admitted.

18 BY MR. SETH:

19 Q. And turn now to PX 159.

20 A. Yes, I have it in front of me.

21 Q. Okay. Do you recognize the document?

22 A. I do recognize this document.

23 Q. Could you identify it for us?

24 A. It's the LogMeIn IT Reach documentation.

25 Q. And did you rely on this document in your infringement

1 analysis?

2 A. Yes. I looked through the documentation in my analysis.

3 MR. SETH: I move PX 159 into evidence, please.

4 MR. STONER: No objection.

5 THE COURT: It's admitted.

6 BY MR. SETH:

7 Q. And PX 153.

8 A. Yes.

9 Q. Do you have it in front of you?

10 A. Yes, I have it in front of me.

11 Q. Do you recognize the document?

12 A. I do.

13 Q. And what is it, please?

14 A. It's the Join.me FAQ, which stands for frequently asked
15 questions.

16 Q. Okay. And did you rely on it?

17 A. I did.

18 Q. How so?

19 A. I looked at it to see the sorts of things that it described
20 that LogMeIn could do -- that Join.me, rather.

21 MR. SETH: We'll move PX 153 into evidence.

22 MR. STONER: No objection.

23 THE COURT: It's admitted.

24 BY MR. SETH:

25 Q. Dr. Grimshaw, you've testified about the LogMeIn source code

1 and the technical documentation. Did you actually use the
2 LogMeIn system also?

3 A. Yes, I did.

4 Q. And did you employ analytical tools as you used the LogMeIn
5 system?

6 A. I employed several analytical tools, primarily essentially
7 packet sniffers, things that let you identify what's going on in
8 the network. So when you have a computer and you're sitting
9 down and you're using the network, all the information is -- is
10 visible to these network probing tools.

11 Q. What did you find when you used the LogMeIn system?

12 A. Well, what I found when using the LogMeIn system is that
13 the -- from the host computer in particular, the connection
14 infrastructure was exactly as described in the documentation and
15 that the sockets were opened as described in the documentation
16 as -- and also as you saw things in the source code.

17 So it behaved exactly as I expected it to.

18 Q. Dr. Grimshaw, did you prepare an exhibit that shows your
19 actual use of the LogMeIn system?

20 A. I did. I think it's very -- you know, explains how the
21 product works really well.

22 Q. And can you describe generally what is shown?

23 A. Briefly, what's shown in this exhibit is I'm logging into
24 the LogMeIn web page. I authenticate myself to the web page.
25 It displays a set of hosts that I can choose to connect to. I

1 select one. It takes me through the process of connecting and
2 then I'm on my desktop at home.

3 I'm -- the client machine that I'm running in this case is
4 in Washington, D.C., at the time, and it basically takes you
5 through the entire process of using the LogMeIn product.

6 Q. Okay. And were you able to confirm that the exhibit fairly
7 and accurately depicts your actual use of the LogMeIn system?

8 A. Yes. It's a very accurate use of a typical interaction.

9 MR. SETH: Your Honor, I request permission to show
10 PX 51, and this is Dr. Grimshaw's actual use of the LogMeIn
11 remote access system.

12 THE COURT: All right.

13 BY MR. SETH:

14 Q. Dr. Grimshaw, can you explain --

15 A. So this the LogMeIn home screen where you go to when you go
16 to www.logmein.com. And so there I am, the first thing I'm
17 doing, and I'm putting in my LogMeIn account ID and then my
18 LogMeIn password.

19 It then displays the host that I have set up LogMeIn host
20 software on. There's two of them. One of them is AGAD -- HDT,
21 which stands for Andrew Grimshaw home desktop. We don't name
22 our machines very cleverly.

23 So I select that that's the host that I wish to connect to.
24 At this point, since on this -- the client browser that I'm
25 operating in I haven't installed the client software, it's

1 asking me for permission to install some software. And so I say
2 yes.

3 At this point the connection has been created between my
4 machine and the client -- or remote machine and the personal
5 computer or host. Now it's downloading the software and it's
6 going to install it. This is ...

7 Now that I'm actually connected up and ready to go, I have
8 to provide my local credentials, the same ones I would use if I
9 sat down at my home machine. So I'm going to type in my user
10 ID, which is Grimshaw. And I actually make a typo in my
11 password. It's not uncommon for me to make typos. And now it's
12 telling me, you made a typo.

13 So I've authenticated to my personal computer using my same
14 credentials. I say okay to continue. And what we're going to
15 see now is my home desktop, the way it actually looks at home
16 when I'm sitting there working. It's got the same desktop. I
17 mean, it's literally the same thing, and I can do all of the
18 things that I can do on my own machine.

19 I can edit files, I can manage databases, look at my music
20 collection. In particular, I'm going to open a PDF of a
21 document that a colleague -- a book a colleague of mine wrote
22 and just to show you that it's all pretty much the same. I then
23 close it.

24 And then I'm going to disconnect. And after I disconnect,
25 it will take me back to the LogMeIn screen where it showed my

1 available hosts, and then I could repeat the process to another
2 machine or I could go back to the same machine again and again
3 and again.

4 So this is the -- the essence of the LogMeIn capability.

5 Q. Thank you, Dr. Grimshaw. What were you able to learn about
6 the LogMeIn remote access system by using it in this way?

7 A. Well, I was able to learn a number of different things, most
8 importantly that it -- the product behaved the way the
9 documentation that I've been given indicated it would. I was
10 also able to -- when I was doing things like this to use these
11 network capture programs -- packet sniffers that I described a
12 minute ago to verify that as well.

13 And so it really was yet another piece of evidence
14 reinforcing to me that in fact the product was infringing on the
15 '479.

16 Q. Okay. Let me show you Exhibit 52, Plaintiff's Exhibit 52,
17 please.

18 A. Yes.

19 Q. And do you recognize this document?

20 A. I do. These are screen shots from the video that we just
21 looked at.

22 MR. SETH: Your Honor, move Plaintiff's Exhibit 52 into
23 evidence.

24 MR. STONER: No objection, Your Honor.

25 THE COURT: It's admitted.

1 BY MR. SETH:

2 Q. Dr. Grimshaw, let me ask you now about the '479 patent.

3 A. Yes.

4 Q. Can you summarize for us the invention of the '479 patent?

5 A. Yeah. So, briefly, the problem that the '479 patent
6 addresses, in the Internet, is that if a computer is behind an
7 Internet proxy or NAT or firewall, such as you might have at
8 home, when you go and get an account or a network -- account
9 from, let's say, Comcast, who I happen to use, they give you a
10 box.

11 And this box is a router or it's a gateway, depends on what
12 you want to call it. So the problem is that the Internet, as it
13 was originally envisioned, was symmetric and you could send
14 packets from any machine to any other machine. But in -- very
15 early on in the process, it became what's called asymmetric,
16 which is a fancy way of saying that I can communicate from my
17 house out to another computer on the Internet and I can
18 establish that connection, but it can't make a connection into
19 me.

20 So that's the problem that it addresses. The way it does
21 that is -- well, that's the problem that it addresses. It makes
22 it so that you can actually make a connection from a remote
23 machine into a machine that's behind an outer firewall, whether
24 it has a static IP address or a dynamic IP address, and
25 specifically the patent addresses dynamic IP addresses.

1 Q. Dr. Grimshaw, did you design a demonstrative exhibit to help
2 explain to us the technology that underlies the '479 patent?

3 A. Yeah. Everybody uses the Internet, but not everybody knows
4 how it works. And we really need to look at one little aspect
5 of how the Internet works in order to understand the benefit
6 that the patent brings.

7 MR. SETH: Your Honor, request permission to show
8 Dr. Grimshaw's demonstrative number 2 designed by Dr. Grimshaw
9 that will help him explain the underlying technology of the '479
10 patent.

11 BY MR. SETH:

12 Q. Okay. Dr. Grimshaw, let's begin. What does this show?

13 A. So this shows the -- sort of a canonical view of the
14 Internet with the personal computer on the left-hand side, or a
15 computer on the left-hand side, and a server computer on the
16 right-hand side and the Internet Cloud in between.

17 The important things to note here is that there's a box in
18 each one of these that has a number that consists of four sets
19 of numbers. For example, 68.87.102.36 --

20 I'll speak more slowly. I'm sorry.

21 68.87.102.36. So that's what's called the IP address,
22 Internet protocol address, of the computer.

23 Both the machine on the left and the right have what
24 are called publicly addressable Internet protocol addresses.

25 Okay. And so if you want to communicate from one computer to

1 another using the Internet, you need to know who you want to
2 talk to, what's their address. In this case, it's
3 173.194.73.106, and you also have an address. So that's the
4 first picture of how the basic Internet packet routing looks.

5 MR. SETH: Okay. Let's go to the next overlay.

6 Marshal, could we ask you for your assistance, please.

7 THE WITNESS: So that's sort of the first step. The
8 problem is that most human beings aren't interested in
9 remembering series of numbers such as 68.87.102.36. That's just
10 not something that human beings are particularly good at. But
11 that's what you need. You need the address to talk.

12 Instead, in our browsers, which you probably all have
13 seen before, you type in something like www.google.com. So what
14 happens in the Internet when you do that is it goes to a service
15 called DNS. It's a directory service. And it looks up, much as
16 a phonebook would, the address of the device.

17 So in this graphic, we're typing in www.google.com. It
18 connects to the DNS server. The DNS server returns the address
19 that we can actually use, 173.194.73.106.

20 I'm sorry you have to type in all those numbers.

21 And then the personal computer has the address of the
22 server computer that corresponds to that.

23 Can we go to the next, please?

24 MR. SETH: Sure. Thanks, marshal.

25 BY MR. SETH:

1 Q. Dr. Grimshaw, what do you show on this?

2 A. So once I have the address of the machine I want to talk to,
3 what I'm going to do is I'm going to establish a communications
4 channel. And what I'm going to do is I'm going to send a
5 message to the other computer that basically says I want to talk
6 to you.

7 And in that message says the receiver IP address, which is
8 over here, 173 dot, et cetera, and my address, 68.87.102.36.
9 And it needs my address because it has to respond to me.

10 You'll also notice there's some additional numbers on there.
11 We call those port numbers because there may be many things on
12 the other computer I want to talk to, and port 80 is the -- what
13 we call the default HTTP port number.

14 So this says I want to talk to the HTTP server at Google.

15 So a message gets sent to -- sent across a packet. Then the
16 server computer receives that. And it says, okay, we'll talk,
17 and it sends that message back. And, once again, now we see
18 that the sender and receiver addresses are flipped because now
19 he's sending it back.

20 THE WITNESS: Next slide, please.

21 MR. SETH: Next slide, please. Thank you, marshal.

22 THE WITNESS: Once the channel is established, at this
23 point you can actually request the web page that you wanted, and
24 in this case we wanted the main page for Google. So we send a
25 web page request.

1 Once again, it has the sender and receiver ports. The
2 server computer serves up that web page and it sends it back and
3 it can be displayed in your browser. So this is sort of how the
4 Internet works in the case when everybody has publicly
5 addressable IP addresses.

6 Next slide, please.

7 MR. SETH: Or should we take that down?

8 THE WITNESS: Actually, we have another board at this
9 point.

10 BY MR. SETH:

11 Q. Okay. Dr. Grimshaw, what are you showing us here?

12 A. So the earlier slides, all the machines were publicly
13 addressable computers. The reality is that many, many, many
14 machines in the world, in fact, don't have publicly addressable
15 IP addresses. There's a lot of reasons for that, one of them
16 being that there aren't enough.

17 But the main thing here is that typically when you get a
18 network connection today from an ISP, you're going to be given
19 an Internet gateway proxy. And this is a device -- and mine at
20 my house, it's a little black device with a router in it and
21 wireless that I got from Comcast.

22 And what it's going to do is it's going to have an address
23 on the Internet. Maybe it's publicly addressable, but it may
24 not be a static address, and instead the machines behind -- as
25 we say in the business -- behind that Internet gateway proxy are

1 going to be assigned dynamic non-addressable IP addresses.

2 And there's two important things in what I just said. First
3 off, they're not publicly addressable or publicly routable.

4 That means that from out here I can't send a message in. Okay.

5 Second, they're not necessarily constant. They can change
6 over time and, in fact, we expect them to change over time.

7 Q. Okay. Let's go to the next overlay, please.

8 A. So now the standard protocol, I want to point out two
9 differences in this slide before I jump into the standard
10 protocol.

11 So on the slide just a moment ago, we show just one house
12 with one of these. The reality is that most everybody on my
13 block, if not everybody, has one of these block boxes in their
14 house. Neal has one in his house. I have one in my house.

15 And we all are given addresses from the same range, publicly
16 un-addressable dynamic IPs. So in fact my neighbor's personal
17 computer could have the same IP address as we show here in
18 yellow as mine because we're all sharing the same set of
19 addresses.

20 So this is the Internet sort of as it really looks today.
21 As we have lots of subnetworks with the same LAN IP addresses
22 out there, we also have many with publicly addressable IP
23 addresses.

24 Q. Let's go to the next slide, please.

25 A. So we're going to ignore my neighbor now, and we're going to

1 focus on what happens in, for example, my house.

2 To my computer it doesn't really look any different. I'm
3 still going to say, when I want to go to Google, for example, I
4 want to talk to you. And I'll send a message out that says I
5 want to talk to you with my IP address and the receiver's IP
6 address. And that's represented by this little -- blue --
7 blue -- excuse me -- packet. I send it out, and it's out there
8 on the network.

9 So can we go to the next, please?

10 MR. SETH: Yes. Thanks, marshal.

11 THE WITNESS: So what happens is that packet arrives at
12 the Internet gateway proxy, and it does a little trick. What it
13 does is it has a table of mappings that it maintains internally.
14 So it takes my packet that I'm sending, it changes the packet.

15 Specifically, it changes who the sender IP address is,
16 and he changes that sender IP address to be -- I'm
17 anthropomorphizing here, the box is not a he -- to his IP
18 address and a special port number that he picks. And he puts in
19 a table that that port number, when it comes in, is going to be
20 mapped back to that personal computer on that port number.

21 So he transforms the packet and he kicks it out.

22 Q. Let's go to the next board, please.

23 A. So to the server computer, it looks just the same as the
24 previous situation. It receives this packet saying I want to
25 talk. It says, okay, let's talk.

1 It sends it back out. It goes back through the Internet.
2 It shows up at the Internet gateway proxy. And what he's going
3 to then do is re-substitute back in the destination IP address
4 and port and forward it on. I think that's shown in the next
5 slide.

6 MR. SETH: Thanks, marshal.

7 THE WITNESS: And so at that point we've established a
8 connection and information can flow back and forth between the
9 personal computer and the server computer so I can say give me
10 the Google page or whatever. It's just now exactly as it was
11 before.

12 BY MR. SETH:

13 Q. Let's go to the last slide.

14 A. So the key issue that I want to really stress here is that
15 by using Internet gateway proxies, or firewalls, the design
16 decision that we've gone through on the Internet to do that
17 means that we can't actually, from another remote computer, make
18 a connection into our house anymore. Okay. Or behind that
19 device.

20 And that's because what would I put for the destination IP
21 address. Because hundreds, thousands, maybe millions of
22 machines at any given time all are going to have 192.168.100.12
23 or -- they're all going to have that. So if a remote computer
24 wants to communicate with one of those machines, there's simply
25 no way to do it. You're given the technology the way it is.

1 And that's what the patent addresses, is that problem, how do I
2 get from a remote computer through firewalls and internal
3 gateway proxies when there are dynamic IP addresses there.

4 MR. SETH: Thanks, marshal.

5 BY MR. SETH:

6 Q. Dr. Grimshaw, I'd like you to take a look at Plaintiff's
7 Exhibit 1, which was admitted into evidence already.

8 A. Yes, I have it.

9 Q. Is this the 01 patent that you've been referring to as the
10 '479 patent?

11 A. Yes, it is.

12 Q. Okay. Could you please look at Fig. 1?

13 A. Yes. I have it.

14 Q. Did you design a demonstrative exhibit to help explain the
15 invention, the '479 patent?

16 A. I did. I created an exhibit that had -- starts with this
17 Fig. 1, and it explains the different pieces and how they
18 interact with one another to effect remote access.

19 MR. SETH: Request permission to show Dr. Grimshaw's
20 demonstrative number 3, based on Fig. 1 of PX 1.

21 BY MR. SETH:

22 Q. Dr. Grimshaw, what's shown on this board?

23 A. So this, as we just mentioned, is Fig. 1 from the '479
24 patent. It's a high-level schematic of the claimed invention.

25 Q. Let's go to the next overlay, please.

1 What do you show here?

2 A. Basically, we've taken the figure and we've simply overlaid
3 a blue box, a green box, and yellow box on top of that so that
4 we can identify the primary devices or components.

5 On the left-hand side is the blue box, is the host computer
6 or personal computer. It's the machine you want to get to. The
7 yellow box is the computer from which you want to get to it, the
8 remote computer. And then the green box is the locator --
9 location server that's going to create and manage this
10 connection.

11 Q. Okay. In the blue box there, there's a box called
12 communication facility. Do you see that?

13 A. Yes, I do.

14 Q. Can you explain to us what that is?

15 A. This is the software on the host computer that's going to
16 enable the communication.

17 Q. Okay. Similarly, there's a box in the green square called
18 location facility. Can you explain to us what that is?

19 A. This is the software that resides on the server computer
20 that's going to provide the functionality needed to do remote
21 access.

22 Q. Let's go to the next board, please.

23 What does this show, Dr. Grimshaw?

24 A. So what this -- this is -- once again, we started with the
25 previous board. We've now labeled the boxes with A, B, and C.

1 Then we've also replaced the somewhat strange-shaped Internet
2 box of before with the more conventional, you know, sort of
3 cloudy picture that you see day in and day out, it seems, and
4 label that with the Internet.

5 We've also labeled them as personal computer, remote
6 computer, and server computer including location facility.

7 Q. How is a personal computer connected to the Internet?

8 A. The personal computer -- it's not shown in this diagram,
9 actually, how it's connected to the Internet. But in the patent
10 description, it describes that the personal computer may either
11 be directly connected to the Internet -- in other words, it has
12 a publicly addressable IP address -- or incorrectly connected to
13 the Internet such as through Internet gateway proxy.

14 Q. Now, let me ask you a question about the server computer in
15 green. Can the server computer be made up of multiple
16 computers?

17 A. Absolutely. Typically you would implement a server with
18 lots and lots of computers.

19 Q. And would those computers be geographically dispersed?

20 A. Yes. As is well known in the art in the early 2000s, and
21 even before that, it was common practice to geographically
22 distribute servers for a number of reasons. Fault tolerance and
23 availability, that's pretty obvious. If a datacenter goes down,
24 you don't want to, you know, be out of business.

25 But also for performance reasons. Because those packets

1 that we're sending around the Internet can travel no faster than
2 the speed of light. That's the old saying. It's not just the
3 law. It's a good idea.

4 And so what that means is that it's a lot of milliseconds
5 from, for example, Virginia to California or Virginia to Tokyo,
6 and it -- those milliseconds really add up to things that human
7 beings will notice. So you want servers to be close to the
8 users so that that, what we call in the business, latency is cut
9 down.

10 Q. Does the '479 patent actually describe a server computer
11 that's comprised of multiple computers?

12 A. It does. In column 5 of the patent, it actually describes
13 that the server computer could comprise multiple machines.

14 Q. Now, what about the location facility? That's the software
15 on the server computer. Have you formed an opinion as to
16 whether or not it can be subdivided across multiple computers
17 that make up the server computer?

18 A. So once again, subdividing software and breaking software up
19 into pieces is just a fundamental thing that we teach starting
20 in 101. It's at a common software design paradigm. It helps
21 you with all kinds of things, from design to testing, et cetera,
22 so it's just something that we do.

23 And so one would expect that the software would be broken up
24 into different modules or subcomponents or subfacilities that
25 would do different pieces, but the key thing is they're all

1 designed to work together as one to provide whatever the
2 functionality is that you're going to provide. That's common
3 practice.

4 Furthermore, in the patent itself, in column 10, it
5 discusses that the location facility could itself be divided
6 into subfacilities. And that's just common practice.

7 MR. SETH: Marshal, let's go to the next board, please.

8 BY MR. SETH:

9 Q. All right. Dr. Grimshaw, what are you showing us here?

10 A. So what we're showing here is the personal computer
11 establishing a connection to the server computer with a ping
12 message and then the intermittent periodic update message that
13 goes with that.

14 Q. Can you explain that a little bit further?

15 A. So the personal computer, when it makes that connection,
16 it's going to be one of these connections like we were talking
17 about earlier. And so that's going to do a number of things.

18 It's going to tell the server computer where the personal
19 computer is located on the Internet, and it will also -- if, for
20 example, the personal computer's IP address changes, that will
21 be detectable because of that.

22 Q. Okay. Let's go to the next overlay, please.

23 Dr. Grimshaw, what are you showing here?

24 A. So what I'm showing here are the -- the steps or the
25 components of the -- of claim 24. And the -- the first one

1 is -- and we'll go into this more in a minute -- is the request
2 for communication with the PC. So the remote computer in the
3 very first step is going to request to communicate with a
4 particular PC, PCA in this case, and that will be received by
5 the server computer.

6 Q. Okay. Let's go to the next overlay, please.

7 A. The server computer then needs to determine the current
8 location of the personal computer. So that's -- the -- the
9 second step is it has to know where it is before it can create
10 the communication channel.

11 Q. How does it do that?

12 A. Well, it's going to look it up in internal databases that it
13 will have.

14 Q. Okay. Let's go to the next overlay, please.

15 A. So this is the final step that consummates the creation of
16 the communication channel that's called for. The location
17 facility or the server computer, having determined the personal
18 location and received the request, is going to create a
19 communication channel -- this part right here -- and -- and
20 sessions on top of that. So once we've created that channel
21 inside the locator server, packets, bytes, requests, whatever,
22 can flow from the remote computer to the personal computer and
23 back.

24 And this, of course, is the big innovation. I can actually
25 go behind those devices in order to -- the Internet, proxy,

1 gateway, firewalls using this technique. So it creates this
2 channel that hooks these things up and makes it all happen.

3 Q. Okay. Dr. Grimshaw, I would like you to look at claim 24 of
4 the patent, and I'm going to ask you to use this demonstrative
5 once you've got claim 24 in front of you.

6 A. Okay. May I have a quick drink of water?

7 I have it in front of me.

8 Q. Okay. What is claim 24 of the '479 patent directed to?

9 A. Claim 24 is directed to the software on the server computer,
10 what is in the patent known as a location facility.

11 Q. Okay. And what are the elements of claim 24?

12 A. So claim 24 has a preamble and then it has several claim
13 elements that need to be satisfied.

14 Q. Okay. Can you show us where these claim elements are using
15 the demonstrative, please?

16 A. Yes, I can. So the -- I'm going to have to -- I need --
17 will point with my other glasses. So the -- can I have the
18 pointer, please?

19 Q. Sure.

20 MR. SETH: Thank you, marshal.

21 THE WITNESS: So the claim elements in the patent refer
22 to a remote computer, the personal computer, and the server
23 computer and -- and refer specifically to, in the later of the
24 claim elements, the different steps, 1, 2, 3, and 4, that occur
25 during the creation of the communication channel.

1 By MR. SETH:

2 Q. Okay. Let's start with the computer-useable medium in claim
3 24.

4 A. Okay.

5 Q. Where is that in the demonstrative?

6 A. So claim A is the computer-useable medium. That would be
7 hard disks, floppy disks, network attached storage, whatever, of
8 the server computer. And in this simple pictorial, that would
9 be on this sort of the tower computer. It would be the hard
10 drive, yeah, for example.

11 Q. With respect to the computer readable program code of claim
12 24?

13 A. Claim 24B is the computer readable program code. That will
14 be the software residing on the computer-useable medium; in
15 other words, the hard drives, network-attached storage, et
16 cetera.

17 Q. Okay. Now, looking at element B1 of claim 24, can you read
18 that to us, please?

19 A. Yes, I can. I'm getting a little old and so the print is
20 small.

21 The server computer program is operable to enable a
22 connection between the remote computer and the server computer.

23 Q. Okay. And what does that refer to?

24 A. This is referring to -- well, it says exactly what it is.
25 It's operable to establish a connection between the personal

1 computer and the server computer, and that's shown with this
2 ping message.

3 Q. Okay. Now, look at element B2 of claim 24. Can you read it
4 and then, using the demonstrative, explain what it refers to?

5 A. Yes. I apologize. This is somewhat dry language, and
6 that's why I needed the water.

7 So I'm going to read the passage word-for-word, and then I'm
8 going to explain to you what it means. So if you can't hear me,
9 let me know.

10 The server computer program includes a location facility and
11 is responsive to a request from the remote computer to
12 communicate with the personal computer to act as an intermediary
13 between the personal computer and the remote computer by
14 creating one or more communication sessions there between, said
15 one or more communication sessions being created by the location
16 facility, in response to receipt of the request for
17 communication with the personal computer from the remote
18 computer, by determining a then current location of the personal
19 computer in creating a communication channel between the remote
20 computer and the personal computer, the location facility being
21 operable to create such communication channel whether the
22 personal computer is linked to the Internet directly with a
23 publicly addressable dynamic IP address or indirectly via an
24 Internet gateway/proxy with a publicly un-addressable LAN IP
25 address.

1 Q. Okay. That was enough. And now can you explain what that
2 means?

3 A. Yeah. So basically this is saying four things. First off,
4 the -- the -- to be infringing it needs to work whether the
5 personal computer has a publicly -- let me read it exactly -- a
6 publicly addressable dynamic IP address or via an Internet
7 gateway proxy with a publicly un-addressable dynamic LAN IP
8 address. So, first off, it has to work in any of those
9 circumstances.

10 Secondly, it needs to have several other phases that are
11 part of it. The first is it has to have the operable to receive
12 a request for communication from the remote computer. Okay.
13 Secondly, once it has received said request, it needs to then
14 determine the current location of the personal computer. Makes
15 sense. It has to know who to talk to.

16 And, then, finally, it needs to create communication
17 channels in sessions, multiple sessions, not just one, between
18 the remote computer and the personal computer so that they can
19 communicate. Those are the requirements.

20 Q. Okay. What about the preamble of claim 24, can you explain
21 that to us?

22 A. Yes. The preamble of claim 24 is a paragraph that literally
23 goes before it. And it, I understand, is not generally
24 necessarily limiting on the claim. But this preamble has two
25 different parts.

1 The first part is that it says -- and I'm quoting here: A
2 computer program product for use on a server computer linked to
3 the Internet and having a static IP address. That's the first
4 one. That language, by the way, doesn't appear anywhere else in
5 the claim.

6 The other -- the second part says: The personal computer
7 being linked to the Internet, its location on the Internet being
8 defined by either (i) a dynamic public IP address (publicly
9 addressable), or (ii) a dynamic LAN IP address (publicly
10 un-addressable) --

11 THE REPORTER: I'm sorry. Can you repeat the last
12 part?

13 THE WITNESS: I'm sorry. Yeah.

14 The last part starting at what word?

15 THE REPORTER: Or (ii) a --

16 THE WITNESS: ii. Okay. (ii) a dynamic LAN IP address
17 (publicly un-addressable), the -- and then it's the computer
18 program product comprising.

19 So basically that's the part that says it has to work
20 with dynamic -- public IP addresses and dynamic non-addressable
21 IP addresses that I discussed earlier.

22 MR. SETH: Okay. Thank you, marshal.

23 BY MR. SETH:

24 Q. Dr. Grimshaw, I now want to ask you about your opinion that
25 the LogMeIn remote access infringes the '479 patent. Did you

1 design a demonstrative exhibit to help you explain your opinion?

2 A. Yes, I did.

3 Q. And what did you do?

4 A. What I did is I -- I took a diagram from the LogMeIn team
5 that they had submitted, and I put it on a poster board. And
6 I'm going to use it to explain what's going on.

7 MR. SETH: Your Honor, I request permission to show
8 Dr. Grimshaw demonstrative number 4, based on a diagram from
9 LogMeIn in this case.

10 BY MR. SETH:

11 Q. Dr. Grimshaw, what do you -- what do you show us here?

12 A. So this is a diagram that was used in a motion for summary
13 judgment. It's from LogMeIn, and it describes how their system
14 works. And at the bottom of it there's a series of -- of steps,
15 and then the lines and arrows correspond to those steps in the
16 communications patterns between the remote access client in the
17 upper left, the host computer in the -- well, it's in the middle
18 left, and then the LogMeIn database server -- not database --
19 LogMeIn datacenter machines in the center.

20 Q. Okay. Let's go to the next overlay, please.

21 What have you done here?

22 A. So what I've done here is I've taken that graphic and I -- I
23 moved the text explaining it out because there's not a lot of
24 room and -- because I want to focus on the diagram itself, and
25 I've centered that and blown it up.

1 Q. Okay.

2 A. Made it bigger rather, not blown it up.

3 Q. Let's go to the next overlay, please. All right.

4 Dr. Grimshaw, what do we see here?

5 A. So what I did here is I used the same technique I used on
6 the -- on the patent to highlight the different devices, and I
7 used the same coloring and lettering to show the similarity. So
8 to the host computer or personal computer is down there in A.
9 Up at the top as B is the remote access client or the remote
10 computer. And then the LogMeIn datacenter machines, the server
11 computer machines, I've circled those in green and -- and
12 labeled that with server computer, including location facility.

13 Inside of there are the load balancing switch that they use
14 in front of their web service, completely standard technology;
15 the database server that we've heard already discussed in the
16 background; and then the gateway servers. These are the three
17 subcomponents that collectively implement the capability.

18 Q. Okay. Now, where in the LogMeIn system is the
19 computer-useable medium of claim 24?

20 A. So the computer-useable medium is -- recall, once again,
21 that's disk drives, network-attached storage, all that kind of
22 stuff. That's going to be located in the gateway machines, the
23 web servers, and the database machines, more likely on their
24 local file systems that are attached to them.

25 Q. Okay. And where is the computer-readable program code of

1 claim 24?

2 A. So, similarly, the program code is going to be on the
3 computer-readable medium, the hard drives, the network-attached
4 storage, things like that, once again, at the locations, at the
5 datacenters.

6 Q. Okay. And with the reference to still claim 24, subpart B1,
7 where is that element?

8 A. Just a moment. I have to remind myself what B1 is.

9 Could you repeat the question again? I'm sorry.

10 Q. Sure. With respect to claim 24, subpart B1, could you read
11 that to us?

12 A. The server computer program is operable to enable a
13 connection between the remote computer and the server computer.

14 So that's -- I've got to get my -- remote computer is B and
15 then connecting to C.

16 Q. Okay. Let's go to the next overlay, please. Dr. Grimshaw,
17 what are you showing us here?

18 A. So what I'm showing here is the first step, which is
19 described in their steps, of things where the host computer is
20 establishing a connection to a gateway server, which is one part
21 of the locator server.

22 As Mr. Anka said, the -- it connects to the datacenter, and
23 it maintains this connection and sends a series of pings. When
24 the connection is made, the servers store information into the
25 database that says which gateway server has it, the ports, and

1 information like that.

2 Q. Let's go to the next overlay, please.

3 And what are you showing here?

4 A. So what I'm showing here is the first of the elements of
5 the -- of claim 24. If you recall in the video, I was at a web
6 page and I -- which is the remote access client, and I selected
7 AGHTD. So their request to communicate with a particular PC is
8 initiated from the remote computer and is then -- and the server
9 computer, the datacenter, is operable to receive that request.

10 Q. Okay. Let's go to the next one, please. And what are you
11 showing us here, Dr. Grimshaw?

12 A. So what I'm showing here is the second required step to
13 determine the then current location of the personal computer.

14 As it says in the diagram earlier, what happens at this
15 point is the web servers are having -- interact with the
16 database server to find out which gateway server to use and also
17 to get a ticket. I think Mr. Anka referred to that in his
18 deposition just now.

19 This ticket is then going to be used in a web redirect to
20 redirect the client's browser to another part of the locator
21 server, like the gateway servers in particular, the particular
22 device on which the server that's communicating with that host
23 is located. And so that determines it and it -- it comes over
24 to the gateway server.

25 Q. Okay. Let's go to the next overlay, please.

1 A. So once the gateway server receives the request, it uses
2 that ticket to look up in the database to make sure this is an
3 authenticated session, that everything is the way that it should
4 be.

5 And at this point what it will do is it will create a set of
6 data structures on the -- in the gateway server that creates
7 this communications channel between -- well, creates a
8 communication channel that allows information to flow from the
9 host computer to the remote computer and back. And that's
10 these, the 3 and 4. It creates the communication session in the
11 channel. So what's happening is exactly the same steps that we
12 saw in the patent.

13 Q. And the LogMeIn server computers create the communication
14 channel and communication sessions?

15 A. Yes, they do.

16 So something I want to explain to the jury just for a second
17 is about this -- this notion that we have in computer science of
18 abstraction. So most people think that they have a computer at
19 home -- well, they know they have a computer at home. But they
20 think that there are files and movies and pictures and word
21 documents and stuff like that on their computer. Well, in fact,
22 there are no such things as files or directories or folders or
23 anything like that.

24 What there are are data structures that describe what a file
25 is and where the words are in the file or what -- that it's a

1 movie file, et cetera. So these abstractions are the things
2 that we call the things underneath. So it's a fundamental
3 concept of system design that -- and it's actually saying even
4 that, you know, one person's primitives, whether it's a file or
5 a communications channel or whatever else, are the
6 next-guy-down's data structures, because the way we make
7 primitives is by creating the data structures that represent
8 them. And that's exactly the case here.

9 The communications channel is the high-level abstraction
10 that moves the bytes back and forth. The reality is it's just
11 some data structures in a C++ program somewhere that hooks all
12 these things together. And it's exactly the same -- excuse
13 me -- with all other sort of primitives that people think of as
14 being a thing. So that's what's going on here.

15 Q. Okay. Applying the Court's definition of the location
16 facility, does the LogMeIn server computer perform all four
17 functions?

18 A. Yes, the locator -- the location server fulfills all of the
19 functions of that. The four -- the pieces -- or three pieces,
20 rather, work together as one in order to provide the
21 functionality.

22 Q. Okay. Now, are the pieces of software that are on each of
23 the LogMeIn server subcomponents written in the same computer
24 language?

25 A. No, they are not.

1 Q. And does that matter to your infringement analysis?

2 A. Not at all. It's not uncommon at all to have an application
3 written in more than one programming language. Different
4 programming languages are appropriate for different sorts of
5 tasks. Oftentimes we Fortran for numerical computations;
6 whereas, we might use another language like Perl or Python for
7 doing string manipulation. And database language is for doing
8 database things. So one uses different languages for different
9 purposes.

10 Q. Is there software on each of the LogMeIn server's
11 subcomponents that perform functions not directly related to
12 providing remote access?

13 A. Absolutely there is. Just like if you wanted a machine at
14 home to be a word processor and do e-mail on, you would go and
15 buy a computer and it would come loaded with probably Windows or
16 Mac OS. It's going to have tons of other software on there that
17 has nothing to do with, you know, working on a document or -- or
18 doing e-mail.

19 Q. Does that affect your infringement?

20 A. No, it doesn't at all. It's -- it's really typical to have
21 lots of different pieces of software.

22 Q. Does the LogMeIn remote access system work if the host
23 computer has a publicly un-addressable dynamic IP address?

24 A. Yes, it does.

25 Q. And how do you know that?

1 A. Well, I know this several ways. First off, I've done it.
2 I've used the software where the host computer had a dynamic
3 publicly addressable IP address. Secondly, the documentation
4 says that it will. Thirdly, the source code and the way the
5 source code is structured in terms of using these communications
6 mechanisms, it would work either way.

7 Q. Dr. Grimshaw, do you have an opinion as to how many LogMeIn
8 users have host computers with dynamic publicly un-addressable
9 IP addresses?

10 A. Right. So it's -- it's my opinion that the vast majority
11 are going to in fact have dynamic publicly un-addressable IP
12 addresses, and the reasons are really pretty simple.

13 The Internet has changed a lot in the last 20 years.
14 There's a lot more devices than there are IP addresses. So when
15 you go to your ISP, your Internet service provider, like
16 Comcast, or whoever you happen to be using, you can either buy
17 a -- a connection or you can buy a connection with a static IP.
18 And the static IP address is going to cost you extra. It
19 depends on the vendor and lots of other things, but it could be
20 anywhere from 5, 10, or \$15 a month for a static IP address.

21 That's a lot -- that's actually a lot of money, and so most
22 people aren't going to do that because most people who buy one
23 of these boxes to connect to Dominion, or whoever, have no idea
24 what a static IP address is, let alone whether they want one or
25 not. So they're not going to pay that extra money.

1 What that means is the vast majority are going to end up
2 having dynamic -- their routers, not shown here, their routers
3 are going to have dynamic IP addresses.

4 But, furthermore, since they're -- they don't want to put
5 just one computer on the network, which is what you would get if
6 you go to Comcast, they're going to put a router on there.
7 They'll have multiple devices, and those that use a DHCP and
8 will have publicly un-addressable dynamic IP addresses.

9 That's sort of longwinded. I apologize.

10 Q. Would somebody who had a static IP address need to use the
11 LogMeIn service?

12 A. No. In fact, if I had a -- and I do at my workplace. I
13 have an IP address for my computer that I've inherited over the
14 years. For 23 years I've had the same IP address for whatever
15 my computer happens to be.

16 It's given to me a DHCP server, a dynamic server, but it's
17 always the same. And since it is, I can connect to my machine
18 at work directly from anywhere in the Internet without any
19 additional software.

20 Q. Dr. Grimshaw, please take a look at PX 61. Is it in your
21 binder?

22 A. Yes, I see it.

23 Q. Have you seen this document before?

24 A. I have.

25 Q. Was this document helpful to you in forming opinion?

1 A. Yeah. It confirmed the things that I believed in. And,
2 yes, it definitely helped.

3 Q. And how so?

4 A. Well, so what this document is is it's a web page from an
5 FAQ or a knowledge base at LogMeIn. And the question that's
6 being asked of the knowledge base is, and I quote: Does LogMeIn
7 work with a dynamic IP address, closed quote.

8 And the answer is, and I quote: LogMeIn does support
9 dynamic IP addresses, closed quote.

10 MR. SETH: Move PX 61 --

11 THE COURT: It's time for us to recess for lunch.
12 We'll recess until 2:15.

13 * * *

14 (Recess taken at 1:03 p.m.)

15

16

17

18 CERTIFICATION

19

20 I certify, this 19th day of March 2013, that the
21 foregoing is a correct transcript from the record of proceedings
22 in the above-entitled matter to the best of my ability.

23

24 /s/

25 _____
Tracy Westfall, RPR, CMRS, CCR

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